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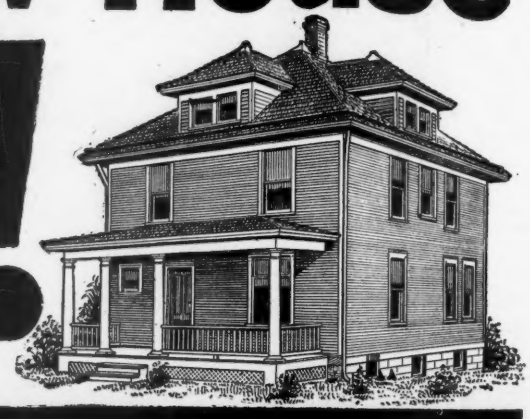
GREEN'S Fruit Grower

1913

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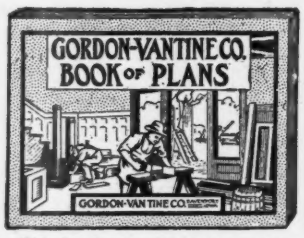
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GREEN'S FRUIT GROWER

A Monthly Magazine for the Fruit Growing Farmer and His Family

CHARLES A. GREEN, Editor

Volume 33 ROCHESTER, N. Y., JANUARY, 1913 Number 1

C. A. Green's Unique Plan for Planting Vines and Trees.

By Charles A. Green, Rochester, N. Y
Editor for 30 years of Green's Fruit Grower.

If you wish to get the result of nearly forty years of my experience in planting vines and trees on the farm, read this article carefully. I can tell you how to plant vines and trees on the farm so that they will occupy but little land and yet yield bountiful crops.

My plan is similar to that which I have adopted at Green's Fruit Farm where there are thousands of fruit trees growing and yielding abundant crops but which do not interfere with the production of other crops in the same field.

My plan is to plow and thoroughly prepare a strip six feet wide through the center of any field suitable for growing fruits. In this strip of land I will plant a row of apple trees only fifteen feet distance in the row between each tree. Then I will divide the distance between the central row and the boundary line at the right with another similar row of apple trees or cherry or dwarf pear or plum, whichever is most salable in my local market. Then I will divide the distance between this central row and the lefthand border of the field and will plant this row to apple, cherry or dwarf pear alternating with standard pear. This will give me three rows of trees extending the entire distance of the field, which I will assume embraces ten acres. If the ten acre field is about square, this at a rude guess will place the three rows of fruit trees from 200 to 300 feet apart.

Notice that by this method the three rows of fruit trees are not in the way in growing grain, potatoes, beans or other common farm crops between the three rows of fruit trees. These trees do not interfere with plowing, harrowing, sowing, or the harvesting of any ordinary farm crop, as I will leave room to turn with machines at the ends of all rows.

Notice further that these three rows of fruit trees, growing and thriving will scarcely lessen the amount of grain or vegetables that can be grown in this field.

Notice further that when these three rows of fruit trees come into bearing they are likely to yield more profit than this same field has ever yielded before when devoted entirely to any farm crop, and yet the farm crop can be grown there the same as before.

Every field on this farm of mine will be planted in the way I have specified. If you do not desire so much fruit on your farm, you can plant only one row of fruit trees, and that through the center of each field. By doing so you will have a large orchard and yet you will not be deflecting any serious acreage of your farm from grain growing.

In some respects fruit trees planted as I have suggested will yield more fruit and better fruit than when planted in solid blocks or orhards, for when planted in orchards the trees often encroach upon each other, the roots are liable to encroach on neighboring trees and the sunlight and fresh air are partially excluded. But by planting as I have indicated there is free access of sunshine and air. Perhaps you have noticed that where one fruit tree is standing alone at a little distance from other fruit trees it is often more productive than trees standing more closely in the orchard, and this is precisely the condition of the trees planted as I have suggested.



CUT SHOWS ROW OF APPLE TREES IN MIDDLE OF FIELD.

ABOUT THOSE GRAPES.

I am a great admirer of the grape. I find the grape a substantial and satisfying food, and believe that it can be made the cheapest possible food for the farmer, his family and his hired men. I will aim to have on this farm enough grape vines to supply every member of the family with all the grapes he can possibly eat at meal time and between meals, giving every person on the farm welcome to help himself liberally to this delicious fruit. In so doing I am confident I will be building up the health and strength of every resident of the farm by the cheapest food that can be produced on the farm. You may be sure that grapes are wholesome when I tell you that in certain parts of Europe they have what is known as the grape cure, where people are fed for months on nothing but grapes and are thus cured of physical ills.

In order to secure an abundance of grapes on my farm I will pursue much the same system that I have indicated in growing fruit trees. I will plow the full length of a field a strip six to eight feet wide, and in the center of this I will plant grape vines six to eight feet apart in a single row, or if I plant two rows the rows will be ten feet apart. These vines will need no support for the first year or two. The third year drive a stake near each vine and train the vine to the stake. I will get an abundance of grapes with no other support than a stout stake six feet high, but if a few wires are strung along this row they will be helpful and profitable.



CUT SHOWS ROW OF GRAPE VINES IN MIDDLE OF FIELD.

I will plant this row of grape vines in a field adjoining the highway, for it will be a beautiful object and will attract the attention of passers by, and may lead others to follow the same method of providing their families and hired help with an abundance of this delicious and healthful fruit.

This row of grape vines should be cultivated at least for the first three years, the same as you would cultivate a row of potatoes or corn. After that ultivation may be dispensed with, but I will get better fruit and more of it by giving the row occasional cultivation as I have suggested.

If your family is very large or you desire to be more than ordinarily liberal with the fruit of these grape vines, you can plant another row or two rows 200 feet distant. Remember that the grape vine comes into bearing early and will continue fruiting for 100 years. One man can prune this single row of grape vines in less than a day. I estimate that the entire care, attention, cultivation and pruning of this one row of grape vines on a ten acre lot may not exceed $5.00 a year, and that the food product secured from this one row may not be less than $100 and possibly $300. Strawberries may be grown in the rows of grapes or trees the first two or three years.

Blackberry rows require considerable room between rows. I see no reason why a row or two of blackberries could not be planted the entire length of some field and kept carefully cultivated. I would not advise anyone to plant anything I have suggested without the intention of giving all careful cultivation, pruning and spraying, for good fruit cannot be produced with neglect, but I see no reason why fruit planted by this novel method should not receive as careful attention as when planted in solid blocks as usual. Indeed they may receive more careful attention because their cultivation is made less difficult by my plan.

Here are suggestions for making a farm one of the most profitable investments. Notice that my plan is to make it a fruit farm and still in the same field have a grain or vegetable farm, yielding profits from both sources, thus largely increasing the revenue. But further than this, consider for a moment how this farm will be beautified by the planting I have suggested. After a few years this farm will have the appearance of a park with rows of beautiful trees filled with blossoms or artistically colored fruits, offering shade and shadows on the green turf. No one could drive by such a farm as this, without having his attention called to the beauty of the scenes or without having a desire to own a similar place. If you should want to sell a farm thus planted you could sell it for nearly double the price of farm land in your locality.

At Green's Fruit Farm we have an open ditch through fertile fields. I have planted on one side of this ditch a row of standard pear trees ten feet apart, which have thrived and borne abundantly for several years. You will notice that I have endeavored to make the most of the waste places on the farm and this ditch line was one of the waste places which has been made fruitful.

I have said nothing about planting fruit trees along the line fences. If your farm is very small and you desire to make the most of it you can plant from 300 to 1000 fruit trees close to the line fence on every side of your farm. The apple, standard pear and cherry will do better in such a location, where cultivation is impossible, than most other fruits. The first thing I did on buying a ten acre field near the city of Rochester, N. Y., was to plant fruit trees all along the field close to the line fence.

I planted these trees immediately on buying this land. Much is gained by promptness in planting trees. There are many people who intend to plant but they put it off until next year and then until the succeeding year and then they are unusually busy and put it off another year and finally do not plant at all. Of course you are busy. Everybody is busy, but the thing to do is to get at it and do it, no matter how busy you are. Hire an extra man and get the work done. You will be surprised to find how quickly and inexpensively you can do this work. If your buildings were on fire you would not excuse yourself from action on account of being busy. No, you would make a dash for the fire and extinguish it. I have been surprised to learn how quickly trees grow and come into fruiting if you can only get them planted. This has been my experience even with nut trees, which are the slowest to grow and the ones that require the longest time to come into fruit. When once planted nature will do the rest if you will give the trees needed attention.

Catching Cold.

By C. A. Green.

Whenever we catch cold it seems our duty to learn how we caught cold so as to avoid another similar experience. Possibly we have been wearing wet shoes after long walks in the slush or have been exposed to draughts of cold air in a hot room, or our bare heads may have been in the draught of a ventilator in a hall where we could not move, or we have been chilled on a long ride or have ventured out with insufficient clothing.

As many people die of colds as of any other disease for the reason that colds weaken the system, lessening the resistance of the body, and permit other diseases like pneumonia to creep in. The person who is suffering from a cold should not treat it as a trivial matter but should proceed at once to be sweated and to remain in bed until the effects of the sweat and the cold have been overcome.

Something new has been learned about catching cold from artic explorers who find that there is no danger of taking cold in the far north region of perpetual frost, for there are no germs that cause colds in that far northern region. All signs of colds in the exploring parties disappear when they get far north, do not appear during their long stay at the north, but immediately reappear on the return of the exploring party to warmer regions.

While here is evidence that colds are conveyed by germs, the fact remains that if we are full of vitality and in perfect health these germs will not be likely to work upon our tissues successfully, but will be overthrown and overcome by our vitality. Bear in mind therefore in regard to all diseases, colds as well as others, that the best preventive is a healthy condition of the body. We should keep ourselves in full health and full vigor and then we can almost defy germs of disease.

Answers to Inquiries.

For a Maine Garden.

Editor Green's Fruit Grower:—I am a new 4 year subscriber to your paper and would like some advise. I am going to set some plum and cherry trees next spring and would like to know what kinds to set for different soils.

I have a piece of ground already that is a mixture of sandy and heavy black soil and want to set a row of plum and cherry trees. What kind would you advise for this kind of soil. What is a good raspberry and blackberry for home use mostly? I have about one acre of light sandy soil that has been a hen yard for 3 years and I would like to set to cherries or plums and let the hens run just the same. This is new for me and want to start right and your reply in your paper will greatly oblige.—H. E. Davis, Maine.

Reply: My experience is that the plum and cherry will succeed on almost any soil that has a fair amount of fertility and that is not wet, that is where the water does not accumulate to prevent growth. No fruit trees will thrive on low, wet or undrained soil. I prefer elevations to low ground, but much good fruit is grown on low ground if well drained.

For Maine I should recommend the hardy red cherry, such as Richmond, English Morello, Dyehouse, Montmorency, and others of that class. Cuthbert and Syracuse are good red raspberries. Kansas and Cumberland are good black raspberries. Eldorado and Snyder are good blackberries. Snyder is probably the best for you as it is the hardiest of all blackberries.

Chestnut Trees Grown From Nuts.

Green's Fruit Grower:—Please to answer the following questions in your valued paper:

1. We have a number of small chestnut trees grown from nuts. Will these trees be true or is it necessary to graft them in order to get good nuts?

2. Are ashes taken from the boiler (flue) good for fertilizer? What value have they?

I like the Fruit Grower very much and have learned a number of good and useful things from it for our orchard.—C. S., Indiana.

Reply: The American sweet chestnut reproduces itself closely from seed. Its seedlings are always sweet chestnuts but the seedlings will vary somewhat in the size of the nuts which will be produced.

At Green's Fruit Farm I have a grove of American sweet chestnuts planted about twenty years ago, which are bearing nuts every year of about the same size as those I used to gather when I was a boy on the farm. These chestnut trees are beautiful in foliage, in blossom and when the burrs are developed. They make a handsome grove and the nuts give pleasure to young people. The timber is valuable for many purposes, therefore it pays to plant chestnut trees. I wonder that there are not more of them planted. In some portions of the eastern states the chestnut trees have perished owing to the presence of some fungus disease. This will make chestnut timber and chestnut trees far more valuable where they survive. I have seen nothing of this disease in Western New York.

If wood is used to heat the boiler the ashes will be of value. If coal is used they will not be nearly so valuable but contain some fertility.

Advice to New Fruit Grower.

Green's Fruit Grower:—I would like to ask a few questions through your valuable journal. I have purchased a farm at West Webster, N. Y., and would like to know what width tires are used on two-horse farm wagons in New York state; 3,000 or 4,000 pounds capacity; also on single farm wagons?

There are about 1,200 young fruit trees on this farm, some of them just coming into bearing. They have been trimmed to make a high head, entirely too high; how can they be made to branch lower?

The Rochester market quotes "Lawton" berry; is that a species of blackberry, or is it a general name for blackberries? What variety do you recommend for the Rochester market?—Edw. J. Wood, D. C.

Reply: The laws regarding widths of tires on wagons in this locality require that if the weight of a wagon and its load is between 2,000 and 5,000 pounds the tire shall be three inches wide; if the wagon and its load weigh over 5,000 pounds, the tire shall be four inches wide. We understand that the width of tire is not specified where the weight of the wagon and load is less than 2,000 pounds.

It is not an easy affair to make low-headed trees out of old trees that have been allowed to form a high hedge. One way would be to dehorn the trees, that is to cut off the tops, leaving a stub three to four feet long. This would be heroic treatment, which I should try to avoid except to dehorn a few trees by way of experiment and reduce the height of the trees in that way. A lot of surplus branches will be formed by dehorning, which will require excessive thinning out, therefore the larger part of the trees I would simply attempt to reduce in heighth by annual cutting back of the high branches. Precisely how to do this cannot be easily told by letter and would have to be something of an experiment in any event. Each tree would have to be pruned differently in order to make it lower-headed. You will find in every tree three or four branches pointing directly skyward, while many of the other branches have more of a tendency to spread out and group. Surely if you cut off those branches that point directly to the sky you will tend to make the tree lower-headed.

Lawton is the name of a very large and fine blackberry. Many blackberries are sold in the Rochester market for Lawtons that are not Lawtons. I do not know of any plantation of genuine Lawton berries about this city. I recommend the Eldorado blackberry for this locality. Where a hardier variety is desired I recommend the Lawton.

I expect to have a 100 acre farm for sale near Green's Fruit Farm with large house, large barns, no waste land, splendid orchard land, which I can sell for $110 per acre. The buildings could not be replaced for $8,000. Should you write again please state how many acres you have bought and what price you paid. I am aware that land in Webster is higher priced than farther inland.

Wants Small Farm.

Mr. C. A. Green:—For a long time I have been trying to find me a few acres of good land at a reasonable price, say about 10 or 15 acres, not stoney, clayey, or slatey, in a good, pleasant location, not far from a small village, containing some fruit trees, good water, small cozy house, barn and hen house. I hope you will try to help me to find a good cheap small place.

I want a home of my own and am not afraid to work, though I do not know much about outdoor work. I want a place where I can raise poultry, keep a cow or two and some pigs. All the friends I really cared for are gone and I do not care to make a home with those who remain, and it is too humilating to work out in most families, though I think I shall have to do something of that kind this winter, and would rather be doing that than nothing. I have a few hundred dollars which an uncle left me. This I have at interest and do not want to draw it until I really need it. Perhaps some of your subscribers know of a few good acres not slatey, stoney or clayey, with good soft water, a deep river near by, near a small town, and where I could have all the items mentioned above. I have never seen any deep rivers like the Hudson river in these western parts. I do not like this locality, it is very stoney and clayey.—Miss Hattie Donaldson, N. Y.

C. A. Green's Reply: I am not in the real estate business and know of no such ten acre farm for sale as you seem to want. I recently bought five acres of good land with a comfortable house and barn, paying $1,200 for it. This indicates about what such a place is worth. If you should buy five acres or ten acres without buildings you would find that building is very expensive. I advise my friends to buy land on which buildings are now standing as the buildings can be bought cheaper than they can be erected. The buildings on my five acre property could not be erected for $1,200. If you should buy ten acres of good productive soil in this locality, Western New York, without buildings, you could not expect to buy it for less than $100 per acre, which would amount to $1000. You could not expect to erect a cottage and barn and make necessary improvements for less than $1,500 or $2,000., therefore this ten acres with the improvements you would make would be apt to cost $2,500., but notice that my five acres with comfortable house and barn cost only $1,200 or half as much as that. This proves what I have long contended that it does not pay to buy land for farming without buildings.

I fear you do not consider the possibility of failure in making success of the ten acres you are thinking of buying, or of the amount of work necessary and the high price of labor which you would have to employ. I know of a poor girl who bought a cottage near a village and a small lot for $400. The house needed a new roof and other repairs, which probably cost at least $200. I am sorry to say that I cannot assist the many who apply to me to find farms for them of various sizes. To find a suitable farm either large or small is a difficult undertaking and often requires long search and sometimes long waits.

I have recently bought 20 acres with house and barn at $150 per acre, the total payment being $3,000. I have been trying to buy this property for 25 years but the man would not sell until recently. This 20 acres was not enough, therefore I was lucky enough to be able to purchase a house and 9 acres adjoining for $900, five acres adjoining for $1,200 with house and barn, and 12 acres adjoining without any buildings for $100 per acre. This will give you some idea of the value of farm land within six miles of Rochester, N. Y., but such opportunities as these do not occur every day.

Mice in Orchards.

Chas. A. Green:—Last year the mice killed a number of my small apple trees. This year I have set out a number which I bought from you and I am thinking of wrapping tarred paper around the trunk up as high as the limbs. Will you let me know at once please if this is a good thing to do, or if you can tell me something better to do. The trees are in New Hampshire and I shall have to do something very soon as snow comes there early.—S. C. French, Mass.

C. A. Green's Reply: Tarred paper may be wrapped around the trunks of trees, beginning from the ground up two or three feet, to prevent injury by mice and rabbits which often gnaw the bark and destroy the trees. Tarred paper if bound tightly and left on year after year might possibly do some injury but would do no injury if removed when spring came and put away for another season's use. Any very stiff stout paper or thin veneer like sheets of wood or a box like protection made of boards might be used. At Green's Fruit Farm all we have to do is to bank up around every tree with earth a foot high. We find that mice as a rule do not climb up this mound of earth. Mice usually root along on the ground surface, but rabbits might gnaw the bark above the mound of earth. Fine wire screen is sometimes used but this is expensive.

Growing Fruit from Seed.

Gentlemen:—How do you prepare apple seeds and when, where and how do you sow them. Also the same with respect to pear an quince seeds. I have sown them the past three falls and springs without a single plant showing up.—John MacDonald, Mass.

C. A. Green's Reply: At Green's Fruit Farm we sow either fresh or dry apple seed, or even fresh apple pomace that has not been heated, without separating the seed from the pomace, in the fall drill rows 3 1-2 feet apart, covering the seed with earth to the depth of two inches. We have no difficulty in making the apple seed thus planted grow. But there are some seeds, and especially nuts, which will not grow if the seeds have become very dry, therefore I lay my new seeds in moist earth immediately on gathering them and do not allow them to dry at all before planting. Treat pear and quince seeds the same as apple seeds. It does not seem to injure peach seed to become dry, though the dry seed may be a little slower to germinate than seed kept moist.

Pruning Grape Vines.

Editor of Green's Fruit Grower:—Please give me a little advice about my 225 grape vines which were killed down to the roots last winter, all except a few small vines which laid down on the ground and were covered with snow all winter. I lay down the young vines in the fall, but after that I leave them up on the wires and trim them in the warm days of winter. The snow came so early last winter that I did not get any of them trimmed. They started out to grow from the ground very rapidly this year and grew from 6 to 15 feet in length. I trimmed them last August, cutting off 4 or 5 feet, and still some of them are from 8 to 15 feet now, and over 1-2 inch in diameter near the roots. What length would you advise me to leave them, and how many canes should I leave from one root? I want to trim them and lay them down before it freezes. I have posts and wires for them to run on.

Last winter was so severe that it nearly killed all the apple trees. The leaves are only about half the usual size, many of the branches are dead, especially the top ones, there is a white spongey growth which has come out on the bodies of the trees, and there were no apples raised in this section this year. The same is true in Nebraska.—M. J. Coombs, Iowa.

C. A. Green's Reply: There are many ways for training grape vines and each method requires different pruning. By the fan system do not leave over three or four canes and cut back those four canes to about four or five feet in length. Last winter was a severe one on fruit trees yet not many orchards were injured in New York, Pennsylvania, Ohio and the other eastern and middle states.

Trees With High Tops.

Green's Fruit Grower:—Last spring I bought an acre of land from an old farmer with eleven apple trees on it in fairly good condition. Two of them I do not know what to do with, will you kindly advise? One of them has been trimmed like a lion's tail, the main stock with a bush on top of it. This tree is about 40 feet high. The other is a very high tree with three branches to it, they do not branch off from main stock until 10 feet from ground. I hate to lose these trees for the fruit is very large and fine.

Would it be advisable to cut off trees on main stock say about five feet from ground if there are one or two suckers? There is another tree with scale on branches on east side of tree. Do you think it best to cut these off?—A. F. Medurio, Mass.

C. A. Green's Reply: Apple and pear trees can be safely headed back (sometimes called dehorning) at any distance from the ground that you may desire. This fall or winter I would head back each tree, leaving simply the trunk and whatever branches may be on the trunk, to a height of five or six feet from the ground, painting over the cut surface. If there are no branches below the point where you wish to cut, there will be more danger in cutting back these trees than there would be if there were branches below the point where the cut is made, but I should expect to see hundreds of branches start out on each of these dehorned trees. Most of these new branches should be removed, leaving simply three or four arms to form the new top.

This heading back of such large and tall growing trees as yours may be considered heroic and may be connected with some risk of losing the trees, but I should cut back the trees if they were mine and take the risk. If you want to be sure to be on the safe side, simply head back one of the trees this winter and wait a year before you cut back the others, so as to learn how the experiment works on the one tree. After a tree has been headed back as I have suggested, it is an easy matter to paint the trunk and the stubs of branches left with lime-sulphur solution, which will destroy all scale.

Learning Orcharding by Correspondence.

Green's Fruit Grower:—Would you kindly give a Fruit Grower reader the following information?

Where can I procure a good mail course in orcharding? A course that will fit me to go into it as a business, from planting the trees to spraying, etc. Have had a common experience in this line, but not from a practical standpoint.—Subscriber.

Reply: While there are correspondence schools advertised for teaching orcharding, and while a capable man may teach much that is helpful by correspondence, I would greatly prefer engaging with some fruit farmer, thus securing a more practical education. There are many things about fruit growing that cannot be taught by correspondence. No man can make another man a proficient pruner of trees by writing letters. Prof. John Craig was the head of a correspondence school for fruit growers but he died a few months ago.

What Should an Elderly Man Plant?

Dear Mr. Green:—I am looking for some light business for I must soon retire from active work in which I have been engaged forty years. I am now a little over sixty years of age but active and like to be busy. I have a surbuban place of four acres, three of which will be devoted to development, but I shall reserve about 120 feet by 300 feet for my recreation.

The land has been lying idle for several years. It is located a mile from the city of Baltimore on an improved state road. Would it be possible to plant some small or dwarf fruit trees which would come into bearing sooner than the standard? I expect to continue teaching for a few years and in the meantime could get the fruit into bearing. I have never given special attention to fruit growing but was raised on a farm where we had several kinds of fruit.—A. J. Brown, Maryland.

Reply: No man should consider himself old at sixty years. Men seventy years old have planted orchards and lived to see them bear abundantly.

No editor can tell you precisely what you should plant. Dwarf apple trees and dwarf pear trees will bear fruit sooner than the standard varieties. Small fruits like the strawberry, raspberry, blackberry and currant bear fruit sooner than any fruit trees. I advise you to consult with some practical fruit-grower in your locality. The ground should be well fitted before the planting is done. If the land is plowed this fall it will be helpful if it is in sod.

What is a publication like Green's Fruit Grower worth to you each year? Its suggestions may save you One Hundred Dollars. Send One Dollar now for a Three Years' Subscription.

What It Costs to Produce a Barrel of Apples.

Actual Figures of an Orchardist.

Editor Green's Fruit Grower:—In the present November issue of the Fruit Grower, you ask your patrons to give you if possible the actual cost of producing and hauling to market one barrel of apples.

I have one acre and a half of bearing apple trees ranging in age from 12 to 35 years. I will submit two methods of reaching your answer. First, let me say I value the ground at $300 per acre and our tax rate is seven-tenths of one per cent.

Then 6% interest on $450.00	$27.00
Land is appraised on tax duplicate at $80.00 per acre, tax	.84
Cost of pruning and clearing up brush	6.00
Spraying 3 times, 8 gallons of "Sprayoleum" 60 cents per gal	4.80
25 lbs. Arsenate of lead	2.00
2 men, 3 days to do the spraying	12.00
Wear and tear on machine, 50 cents per day	1.50
Picking and sorting apples	30.00
Hauling to market	40.00
Barrels for 250 bushels (second hand) 10 cents per barrel	8.10
Cost of making and marketing cider	10.00
Total	$142.24

The crop this year was as follows:

Picked winter apples 250 bushels at 75 cents per bushel	187.50
Summer and fall apples 170 bushel at 75 cents per bushel	137.00
80 bushels of cider apples, 280 gallons cider at 10 cents	28.00

Total 500 bushels of apples worth $352.50

Now if the 500 bushels had all been barreled the cost for barrels would have been doubled but it only seems necessary to barrel the winter apples. But if it be necessary to get at the true cost to furnish barrels for the 500 bushels the total cost would be $150.34 instead of $142.24 and the cost of 163 barrels delivered to the market per barrel would be $150.34÷163 = .92+.

The other proposition is as follows:

In and among the trees is one Baldwin tree 35 years old that produced this year 33 bushels of picked apples, 7 bushels of fallen apples and 4 bushels of cider apples. The crops brought $29.85. Figuring on the above basis there were 11 barrels of picked apples. Cost of pruning $1.00, spraying, material and work $1.02, acid phosphate 16 pounds, 11 cents, cutting grass around the tree 10 cents, picking and sorting apples $2.00, hauling to market $2.00, interest and tax on land 44 cents, making a total of $6.72 as a total cost for 11 barrels of apples, then $6.72÷11=.61 1-11, making 61 1-11 cents as the cost for producing one barrel of apples. But if the tree does not bear next year the cost would go on and the expense would be doubled or almost so.—R. A. Mohler, Ohio.

Rabbit Injury.

Mr. Green:—Would you kindly advise through your valuable Fruit Grower what is best for one year fruit trees to protect them from rabbits and mice from injuring the trunks of same. Some say that fresh cow manure put on with a brush before freezing time will protect them. I was also told that carbolineum was good to apply on the trunks, but I would rather follow your advice.—Henry Hausen, Ill.

Reply: Do not apply any greasy or tarry substance to the trunks of your trees for any reason whatever as it is dangerous to apply such mixtures or paints. Tarred paper can be wrapped loosely around the trunk if removed the next spring, or thin sheets of wood veneer.

Concerning Peach Trees.

Editor of Green's Fruit Grower:—I am trying to learn all I can about peach trees as in a couple of years I expect to raise peaches for a living. I now have six peach and some other fruit trees that I am experimenting on, trying spraying and not spraying, summer pruning and winter pruning, etc. This year the peach trees bore for the first time, but as last winter killed many of the buds I decided not to spray this year for curculio. The peaches started to dry up and I cut them open and found in every one a worm, so next year I will spray. An old darkey from the Delaware peach belt told me that in the fall they scraped away the dirt from the peach trees, leaving the roots exposed, sprinkled coarse salt around the roots, left them open all winter and in the spring plowed the earth back again. He could not tell the reason for this. Kindly tell me in the Fruit Grower why this was done. —Burton K. Thatford, Pa.

Reply: The roots of peach trees about the collar and the surface of the ground are often removed in order to search for the white grub which often works in the roots near the surface. I would not advise leaving the roots exposed during winter, but after the search for the grub and destroying the grub I would replace the earth in its former position.

There are inexperienced people who think they must spray their fruit trees whether there is any reason for it or not, but I consider this a mistake. Do not spray your trees unless you have some clearly defined reason for doing so. I have never sprayed a peach tree for curculio as this insect does not do much injury to peaches in this locality so far as I know.

He Wants to Sell His Book or Get it Published.

C. A. Green's Reply: I have today for the first time looked over your copy for poultry book and find that it is not available for me. The patenting of a device or the writing of a book or a magazine article is easy compared with the difficulty of getting a man to introduce the invention or to publish the book. There is more money lost every year in publishing books than there is made, and the same is nearly true of publications; weekly, monthly, etc., thus you will see that the publishing business is a poor business.

I regret that I cannot give you an encouraging reply. It is one of the painful things connected with men in positions as editors, etc., that they must seemingly be harsh in their replies, but it semes to be a necessity that cannot be avoided when one is asked to purchase or to publish.

I have had considerable experience in publishing and would caution you or any other person not to attempt to publish their own book as it is an expensive affair and not at all likely to be successful or profitable.

Quack Grass and Thistles.

Editor Fruit Grower:—Would you be so kind as to give instructions to your readers as to the best way to destroy quack grass and Canada thistles and greatly oblige many readers.—Mrs. G. Ivins, Iowa

Reply: When I took possession of Green's Fruit Farm it had been rented for many years, was in a run down condition, and many of the fields were infested with Canada thistles and quack grass. At that time we knew of no particular system or method of getting rid of these pests, but we gave the fields thorough and frequent cultivation and it was not long before these weeds entirely disappeared.

I advise plowing fields infested with quack not over six inches deep late in the fall just before winter sets in. This exposes a large number of quack roots to the destructive influences of winter freezing. In the spring I would thoroughly harrow the soil, using a spring tooth harrow, which will throw the roots to the surface. These can be raked off, after which more harrowing and another plowing can be given, the aim being to remove as many of the roots as possible. After this keep the ground in thorough cultivation,planting corn or potatoes or something of that kind.

While treatment for Canada thistle should be similar to that of the quack, it is conceded that Canada thistles cannot be so easily disposed of as quack grass, owing to the ramification of the roots in the deep subsoil.

New York or Oregon?

Editor of Green's Fruit Grower:—Kindly inform me about farms in Oregon. Is that a good locality for fruit and farm produce? Is there a good market or shipping facilities? Can you give me the address of anybody who will give me reliable information? What is the value of farms in Oregon?—Fred B. Scoralick, N. Y.

C. A. Green's Reply: If you will write the Chamber of Commerce at Portland, Oregon, they will probably give you the information asked for. But why should you leave New York state for Oregon or any other western point? I can sell you a farm of 100 acres, located near Green's Fruit Farm about thirteen miles from the city of Rochester, N. Y., for about $110 an an acre. The buildings on this farm could not be built today for $8,000. It is a beautiful and productive farm and must be sold to close an estate. I am convinced that farm lands well located in Monroe county in the fruit growing districts are the cheapest lands in the world. But I have nothing to say against Oregon, or any other part of this glorious country.

Reply to L. Bros: Pruning fruit trees in the fall or winter will not result in injury providing the pruning is properly done and not too much wood cut out during any one year. At Green's Fruit Farm we are careful not to prune the cherry and plum much, if any, after the trees begin to bear fruit, as wounds in the cherry and plum do not heal over so readily as in apple, pear and other trees.



Varieties of Apples for Wisconsin—If I were asked my opinion I should recommend hardy apples for Wisconsin, such as Duchess, Yellow Transparent, Fameuse or Snow, Stark, Gano, McIntosh Red, Pewaukee, Ben Davis, Northwestern Greening, Wealthy, Wolfe River, and any of the crab apples. This list is certainly long enough. For the commercial orchardist I would not recommend planting so many varieties, but all the varieties I have named are supposed to be hardy varieties.

The Family Orchard—Its Size and Scope.

Editor Green's Fruit Grower:—I have been a subscriber to your most valuable "Fruit Grower" for about three years. During this time I have planted and tended 400 trees all varieties of fruit. I bought six acres for $133 per acre five years ago. Last year I sold this land for $600 per acre, quite an increase, and I credit it all to growing of fruit. I have now recently bought twenty-five acres and I wish to ask you through the columns of your paper what variety of trees and how many would you recommend for a "family orchard."—J. C. Reader, Ill.

Reply: The above is an interesting question and I thank our friend for suggesting it.

Commercial orchards are very important and are a great asset over a wide extent of this continent, but of far greater importance than all the commercial orchards are those smaller plantings intended for the home supply, the home table, and for home canning and preserving.

It is my opinion founded on wide observation and extensive travel that not one farm in fifty over this entire country is producing a supply of the various hardy small fruits such as raspberry, blackberry, currant, gooseberry, grape, and the larger fruits such as peach, pear, plum, quince, apple and cherry. I say not one farm in fifty is supplied, wishing to be entirely safe in my estimate, but my suspicion is that not one farm in a hundred in this country is supplied with these most necessary products in a land where fruits are grown with th least possible labor and cost.

This is a lamentable condition of affairs. Anything that can be said or done to induce the farmer or villager to plant vines and trees to supply his own table with fresh grown fruits is greatly to be desired.

What variety of trees and how many would I recommend, is the question. For commercial orchards I do not advise the planting of a large number of varieties except it be a specimen row of odd varieties for the purpose of testing their value in that particular locality. But for the home supply orchard I advise a number of choice or rare varieties.

We have at Green's Fruit Farm over one hundred varieties of apples in full bearing. One of the great treats which I enjoy each year is visiting the orchard in August and October and viewing the different varieties when the trees are heavy laden with beautiful fruit. Another pleasurable experience comes when a big wagon comes from the farm to my city home full of boxes baskets of apples, grapes and pears of the highest quality, which are placed in my cool cellar for the use of myself, my family and neighbors.

It is so easy to have a large number of varieties represented in this home supply orchard or fruit garden that I would say do not be satisfied with less than 25 varieties. Do not fail to plant the following superior varieties of apples: Wismer's Dessert, Melon, Hubbardston, Jonathan, Spy, Grimes' Golden, Banana, Winesap, Stayman's Winesap, Lyman's Pound Sweet, Jacob's Sweet, King, Rhode Island Greening, McIntosh, Delicious, Fanny, Famouse, Gravenstein, Duchess, Blenheim Orange, Yellow Transparent, Bellflower.

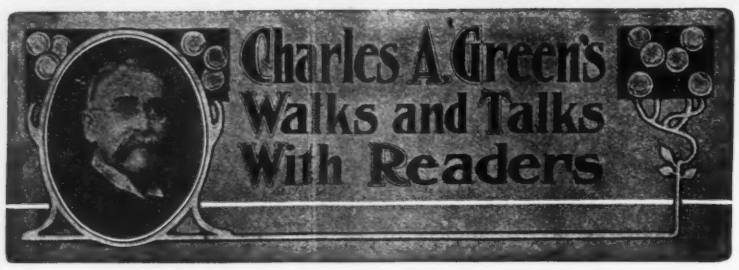
If you have limited space for your fruit garden or orchard all of the above varieties could be grown in one row planted ten feet apart, if there is nothing on either side to prevent the trees getting sun and air on either side, but if you have plenty of room I should place them nearly two rods apart. When these trees begin to bear fruit you will find your neighbors and friends coming to see the marvelous sight and to test these superior varieties.

Plant 100 red raspberry and 100 blackcap raspberry plants, 100 blackberry plants, 25 currant and 10 or 20 grapes vines Do not forget to plant asparagus and rhubarb, and a selection of flowering shrubs, vines and trees.

This home supply fruit garden, as we will call it, should be as near the house as possible but not nearer than five or ten rods. It may be in a square plot of land or in almost any conceivable shape according to the lay of the land. The soil should be carefully prepared before planting. The small fruits can be grown between the rows of fruit bearing trees if necessary.

Such a home supply fruit garden will be one of the most attractive features of your country home. While a commercial orchard properly managed is remarkably profitable, I estimate that fruit grown for the home supply will yield ten times the profit of any commercial orchard.

E. N. Berry of Otero county has a peach crop this year that will net him something like $2,500. He has 300 trees, which, in this year of no peaches on the eastern slope, are hanging full of ripening peaches. This big crop is the result of having buried the trees long before the severe winter set in. During the many years he has been following this custom, he has been the butt of much adverse criticism and derision. Today he points to his orchard as proof that burying a peach orchard is necessary to insure a crop every year on this side of the slope and this is the idea we propagated twenty-five years ago when not much fruit of any kind was grown in the entire country.



"Think nothing done while aught remains to do" said Napoleon.

ROCHESTER, N. Y., JANUARY, 1913

My Neighbor's Grape Vines.

I have a near neighbor who bought a corner of my five acre city lot and built thereon a house for himself and family. I had planted along that western border where his lot was located, the Niagara, Delaware, Worden, Brighton and other grapes close to the line, where they would occupy scarcely any room and the vines would trail along the wire fence.

After my neighbor built his house he constructed arbors and made these grape vines remarkably attractive as ornaments to his place. Often I would take a peek at these grape arbors. The large clusters were hanging overhead attractively and the foliage of the grapes made grateful shade on hot days for the children who played in the arbor. My neighbor planted a few more grape vines. He tells me that his family of eight get a considerable portion of their food supply from these grape vines each season, that they have an abundant supply and have not altogether twenty vines bearing fruit. It is my neighbor's belief that he and his family are greatly improved in health by having an abundance of this delightful fruit to feed upon at all hours of the day. In addition to the fruit, which amounts to barrels each season, the vines are an attractive feature to his place.

Don't fail to plant grape vines. There is no fruit more easily grown than grapes. A grape vine will live and bear fruit for over a hundred years. The vines in my neighbor's yard receive no cultivation but are pruned annually.

Obtrusiveness in Art.

I have recently purchased a small painting by John F. Carlsen, the well known New York artist and teacher of art, which gives me much pleasure. As I sit in my den I have this little painting on the easel before me with none other to distract my attention. This is the Japanese idea of bringing into a room but one picture at a time, the one picture to be replaced by another tomorrow, and so on.

I ask myself why I should be so charmed by such a simple little work of art. My answer is first, because it is simple and simplicity is a great charm in anything. But further than this, there is nothing obstrusive in this winter's scene of a mountain side, a farm house and farm lands covered with snow at the foot of the mountain. If an unskillful artist had painted this picture he would have made the mountain, the farmhouse and the twin oak trees, which still hold their foliage, obstrusive. Nature seldom forces anything upon our attention.

While seated in one of our city offices recently, my attention was called to a picture representing a steamship entering the harbor surrounded by ferry boats, yachts and tugs, and I asked myself this question, "What is wrong with this picture?" My answer was, "The boats, the principal objects, are obstrusive. They are made too conspicuous. They do not merge into the view as they would in nature."

If you stand upon the dock in the harbor and watch the ships coming in and going out, you will notice that they blend more or less, according to the distance, with the atmosphere, with the water and the clouds so that your eye discovers no clearly defined line between the boat and the water, or the sails and the sky, thus the whole scene becomes harmonious and unobtrusive.

One reason why certain portraits look hard and are not attractive is that the face and form upon the canvas are too conspicuous. A man sitting in the parlor or library is not so conspicuous as many artists would make him appear to be upon the canvas which he is painting. Rembrant's portraits are notable examples of unobtrusiveness, yet they reveal character marvelously.

Farm Machinery and Implements.

A specialist engaged in teaching college students asks me to mention what I consider to be marvelous farm machinery inventions and to suggest improved implements needed on the farm which are not now manufactured.

C. A. Green's Reply: I will mention first a ditching machine propelled by eight horses, four horses working on each side of the ditch. I will not attempt to describe this machine which opens the ditch, throws aside the soil taken from the ditch, and prepares it for the tile with two or three movements of the machine over the same trench. We have one of the ditchers at Green's Fruit Farm. Another large Rochester company has one of these ditching machines.

Another notable invention is a big plow propelled by a gasoline engine. This plow turns a furrow two feet high and one foot deep, or deeper, tearing up small trees, shrubs, saplings, and small stumps, like weeds. This machine is most useful in clearing up land in the west and middle west.

The potato digger and cabbage and strawberry plant planter are notable machines of comparatively recent introduction, as is the straw carrier of the modern threshing machine, which through a blast of compressed air forces the straw far out toward the middle of the stack.

Among the devices that have come into recent use are the blowing out of stumps and rocks by explosives. Whereas we used to drill holes laborously in rocks in order to blast them, now the rocks are blasted by simply placing the explosive on top of the boulder and covering it with wet earth.

To make an inventory of all the notable inventions helpful to the farmer is a big undertaking, which I shall not attempt. Ditching machines are numerous, some of them digging what might be called a small canal at one operation, thus draining swamps, the intention being to leave the drain open.

The road scraper is another helpful rural implement. The self-binding reaper has accomplished marvelous results in reducing the cost of grain.

As regards farm tools still needed, I must leave that with the inventor. We have corn planters but no potato planters. There is room for improvement in chicken incubators, brooders and poultry houses, and a cheap small package for apples, other fruit and eggs.

The farm kitchen is overlooked by the inventor. There are many opportunities for inventions that will relieve the farmer's wife in her kitchen work. While the farmer's work has been greatly reduced by inventions, the work of the housewife has received but little attention.

Tree Surgery.

Tree Surgery.—After reading "Twentieth Century Tree Surgery" I am at a loss to know whether the dead rotten wood should be chiseled out to the green wood, or only to the solid wood, and then the hollow filled with concrete.—S., Kansas.

Reply: In many cases it would be all right to leave the perfectly sound wood even though it is not green. In that case before the cement is put in, the wound ought to be painted with some good paint like carbolineum or tar, then apply the cement and fill the cavity as one would fill a tooth. Be sure to have the wound perfectly clear of all decayed matter. The sound wood if perfectly free from further rotting will do no harm.

New Thought on Fruit Distribution.

It is conceded that there is no danger of an overproduction of fruit of any kind in this country providing distribution can be secured. The question has ever been how to distribute the extensive crops of apples, peaches, pears, grapes, strawberries and other fruits that are produced so freely in this wonderful land of ours. Strange to relate the officials of many cities and particularly of Rochester, N. Y., will not permit the farmer or fruit grower to come in to Rochester with a load of fruit and sell it direct to the consumer unless the farmer will pay a considerable sum for a huckster's license. This the farmer will not do because he does not make a business of peddling and may not come into the city except during a short period of the year.

Supposing farmers were allowed to bring fruit and vegetables, chickens, eggs, and other farm products into the city and sell it direct to various families, look at the result. This fall the most beautiful apples imaginable were allowed to go to waste under the trees when there were thousands of families in this city who would have been glad to pay a moderate price for this fruit, which was too ripe for shipment and possibly a little bruised by falling to the ground. I can imagine that if the farmer were free to sell here on the street he might have on his wagon forty bushels of these apples and could afford to sell them at 10 cents a peck, 18 cents per half bushel, or 30 cents per bushel. You can easily imagine how quickly this load of fine big ripe juicy apples would be picked up by housekeepers. I cannot think that it would take the farmer long to sell a load of apples at these prices, which would yield him $12.00 or $15.00 for the load. He could manage the same way with his peaches, pears, plums, quinces and other fruits, although he might not be able to offer all these fruits at so great a bargain as the apples. In conformance with the present restrictions the farmer is compelled to sell to the grocer. The grocer must charge a reasonable profit, therefore the consumer is unable to buy at a price that farmers would gladly accept if they had the privilege of selling where-ever they could find a buyer.

B. F. Yoakum, an authority on distribution, says the farmers of this country have surplus produce to sell worth $6,000,000,000, which owing to bad methods of distribution cost the consumer $13,000,000,000. Some one who stands between the producer and the consumer gets $7,000,000,000, a large proportion of which should be saved to lessen the cost of living.



Here is a well shaped and thrifty young Wisconsin apple tree. Notice that there are a few bunches of grass and weeds beneath the tree. Certain nurserymen would object to even a spear of grass or weed, while others plow the orchard as soon as there is a mat of weeds or grass to turn under, late in June, and give the orchard no further cultivation, thinking that a few spears of grass or weeds do no injury, and I believe they are correct. The character of the soil is a governing factor as regards cultivation. The orchard I mention is of a sandy nature, not inclined to bake or harden after rains. Where the soil is more clayey more cultivation is demanded.

A Club Sensation Caused by Apples.

I am a member of a social club in the city of Rochester, N. Y. The members of this club are lawyers, doctors and business men of various kinds, successful, enterprising, bright and interesting men.

Yesterday I carried to the club three baskets of choice apples such as Wismer's Dessert, Melon, Shiawasse Beauty, Fameuse, Jacob's Sweet, and other similar varieties. No sooner had I taken these baskets from my carriage and placed them on the sidewalk than a member of the club approached saying he was just in time. He picked up a McIntosh Red and said he would take it home to his wife.

I began my game of billiards with an intimate friend soon after at the club and casually asked him if he was an eater and admirer of apples.

"O, yes," he replied, "I did not used to eat apples but now I am getting to eat more of them. I have in my house a barrel of King and Spy."

This friend did not show any marvelous enthusiasm on the subject, therefore I said no more. After a while a member of the club who had been engaged at the other end of a large room came to me with a Wismer's Dessert in his hand from my basket and wanted to know what apple that was. He said it was new to him and he went on to tell of his enthusiastic admiration of the apple as a delicious and healthful fruit. He told of his making annually an excuse to go down into Virginia where they grow the Albemarle or Newton Pippin in such perfection and how he enjoyed tramping through those orchards and eating the splendid fruit.

This friend had no more than finished his eulogy of the apple when the friend with whom I was playing returned from a short sojurn through the refreshment room of the club crying out, "What kind of a fellow is this man Green any way? Here he has brought three baskets of good apples into the club and I have not got one of them! He has given them to everybody but to his best friends!"

"Why," I replied, "I asked you if you were fond of apples. If you had shown sufficient enthusiasm my intention was to send a basket of the fruit to your home." But this man would not listen to any of my explanations and considered himself seriously offended, jokingly of course.

I am reminded by this experience that there are many apple eaters in the world, many people who like apples, but who have little knowledge as regards the value or quality of different varieties. It is safe to say that half the population of this country would like to eat apples if there were any way of getting them at a price which they could afford to pay. The trouble is in distribution, as I have often said and shall continue to say for many years to come. If good apples could be placed in the hands of the people at the price or near the price that the producer gets, there would not be half enough apples grown in the country to supply the demand.

What Can be Done on a Farm of Ten Acres.

Ike Marvel years ago wrote an interesting book entitled "Ten Acres Enough." While much can be done with ten acres of land on which to live and have your home, there are many people who doubt that a living can be made on ten acres.

My attention is called to a report made by a Rochester man of what he considers it possible to accomplish on a ten acre lot located near this city. He figures that one hundred hens will produce revenue of $100. per year, that his patch of potatoes yielding 40 bushels would yield $40.00, that his house, lot and barn should be worth to the owner at least $100 a year, that $100 worth of vegetables would be sold each year.

As regards fruit, this man estimates that $125 could be secured from the sale of strawberries and raspberries, and that from 28 peach trees $140 could be secured.

This is all very interesting, but the fact remains that nothing is said here in this estimate about the off years, the bad years, that is the years when the peach trees do not bear fruit or when the strawberries have their blossoms injured by late spring frosts, or when the rot attacks the potatoes. We must take into account the bad seasons if we are going to make an estimate of the profits of any enterprise. I consider the above estimate exagerated.

An honest man's word is as good as his bond when you've nothing to lose.

Value of Money.

If money made the birds sing any sweeter,
Or made the skies a brighter, better blue
If money made a summer day completer.
Or added to the sunset's gorgeous view
If money made a meadow more entrancing;
A shady lane a better place to stroll;
If gold could add one bit to my romancing,
On money then I'd strive to feed my soul.
—Detroit "Free Press."

The above is very prettily expressed and would seem to be conclusive, but it is simply a poetic expression and will not bear critical analysis.

Money will make more bird music, may make the skies brighter, the summer day more complete and the sunset more gorgeous. Money can make the meadow more entrancing, the shady lane more inviting, and may be made to feed the soul. Money is indeed a marvelous thing and is seldom understood or appreciated. It is one of the greatest forces in the world.

Mrs. Russell Sage's money has converted seventy-five thousand acres of swampy land into a bird paradise. For a hundred years hunters have shot myriads of birds on this vast tract. Now through Mrs. Sage's generosity and thoughtfulness fourteen square miles of territory is made a paradise for birds where they can breed and enjoy themselves unmolested. Here is an instance where money has made birds' songs sweeter.

Money can make a summer's day more complete by enabling the invalid or whosoever will to get out into the open country, to the mountainside or to the lake or river, or to distant lands where sunshine is perpetual.

Money can make the sunset more gorgeous by providing a setting for the sunset. Have you not noticed that it makes a difference where you see the sun go down? If the sun sets over a forest or hills covered with vines or fruit trees, or behind a lake, it is far more attractive than if it sets behind incongruous buildings or factories.

Money can make the meadow more entrancing by converting it into a park with open expanses in contrast with clumps of shrubs and ornamental trees and here and there a glimpse of water.

Money can make the shady lane more attractive for a stroll by building walks and by paving the streets so we will not have to tramp through the mud or the dust.

Money can be made to feed the soul if it enables us to build a hospital or to establish an institute for medical research that will alleviate human suffering for centuries, or if it will enable us to send missionaries to the needy of foreign lands.

The Gossiping Parrot.

For many years I have had a pet African parrot in my home. He acts and seems like one of the family. He says many queer things. When I come down to my breakfast he says "Good morning." He does not say good morning at any other time of day than in early morning. He is very affectionate and interesting.

We have a neighbor, an invalid lady, who spends much more time with her parrot than I can with mine, therefore her parrot has a much larger vocabulary than mine. Mrs. Green has been visiting at this neighbor's and has recorded some of the sayings of this neighbor's parrot, which are as follows:

You are a pretty bird.
You are a naughty bird.
Sneeze, sneeze, sneeze.
Hello Polly, then he whistles.
Now you stop that!
Then he would bark like a dog.
Cuckoo, cuckoo, sneeze, sneeze.
You quit that, you be a good bird.
Stop your noise, you stop it!
Poor Polly, yes I will.
Then he would laugh.
Want your dinner; no Polly.
Then he would sing, Pretty Polly Hopkins diddle, diddle dee, the cat's got a flea.
Its pretty cold you little darling, you dear little sugar plum.
Polly is a sweet bird.
Come kiss your mother.
Who are you? Polly don't know.
Oh you sweet little bird. You poor dear.
Oh dear, Polly is so cold
I will whip, yes I will
What you talking about? Polly don't know.
Poor little dear, you poor little darling.
Come kiss me you pretty bird.
I am ashamed of you. You are a naughty bird, I am ashamed of you.
Poor little soul, are you sick? You little darling. Then he would whistle.
Do you want your dinner?
Oh dear, dear, dear, dear, Polly is so sick.
Cuckoo, cuckoo, cuckoo.
Polly is a pretty bird, yes you are.
Polly is sick. Kiss me.
Polly wants her supper and go to bed.
Don't you dare to bite. I will whip you, yes I will whip hard. Cuckoo, cuckoo.
Poor Polly, got a pain in my stomach. Then he would sneeze two or three times.
You are a naughty bird. Here Roy, come kiss Polly quick. Oh you pretty little bird.

GREEN'S FRUIT GROWER

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EDITORIAL.

An Act of A Barbarian.

We hear sometimes of the conversion of a heathen or barbarian to the Christian faith. Many may assume that this converted barbarian is about equal in moral character to an individual born into the church and one who has inherited good tendencies through the parentage of many generations, but this is an error. We must not expect so much from the heathen or the barbarian who is converted. I give below an incident illustrating this thought. Surely the incident is unusual and yet I have heard of others similar.

Linant, in fact, in his reports to Gordon, declared that subsequently to the pretended conversion. M'tesa seized a gun given him by Stanley, and said to the latter: "See me shoot." And, lo! the converted King took aim at one of his numerous wives, blew off her head, and exclaimed with every manifestation of pride! "M'tesa very good shot." The subsequent massacre of Bishop Hannington and his mission may be cited as a further illustration of the fictitious conversion of M'tesa, King of Uganda.

Origin of the Indian.

Mr. L. P. Kinsel writes Green's Fruit Grower an interesting letter claiming that the American Indian is a cross between the negro and the white race. There are others who hold that the Indian is a descendent of the Orientals of Japan or China. It is doubtful we shall ever know accurately or positively just how the American Indian did originate.

When we come to think of this subject how surprising that when this continent was discovered it should be found inhabited by an apparently new race of human beings. The Indian must ever be an object of great interest to the historian and the anthropologist. All relics, photographs and paintings which are connected with the Indian, will in time become remarkably valuable.

I consider it is a mistake to assume that the Indian is by nature cruel or murderous. When the white race first began to establish itself on this continent, the Indians were remarkably friendly, but they were imposed upon shamefully by the white man. There is no doubt in my mind that the main reason for the apparent cruelty of the Indian race has been owing to the unjust treatment which the Indian has received at the hands of the white man.

A Pioneer Apple Grower.

There must be the pioneer, which means the first man to do anything. There was the first man to engage in agriculture. Nobody knows who he was or how long ago he lived. There was the first man who ever rode a horse or harnessed a horse, the first man who thought of building a wagon or boat. Everything must have a beginning. Way back in antiquity lived a man who was the first who ever planted a tree.

The pioneer of apple growing in the great northwest was Ezra Leonard Smith, known as the Father of the Apple Industry. He came from the east in 1850 and soon after had a reputation for doing things. Unlike Johnny Appleseed, who went through state after state planting the seeds of apples in open places in the forests, this man taught by example and precept the advantage of the most careful cultivation, irrigation, sorting and packing in boxes.

His example was followed by younger men, orchards were found to be the most profitable method of occupying the land, and land values rapidly advanced, making fortunes for not only Mr. Smith but for his friends and followers. He could say with confidence to buyers of his apples, "Find a bad apple and I will give you the entire carload." This has since become a slogan of the famous Hood River Valley of Oregon.

Breeding Corn in the Same Way That Poultry and Cattle Are Bred.

Interest in the corn crop is constantly increasing. Corn has not been used as an article of food for humanity the world over as it would have been had it been fully appreciated. Of late years corn has come into its own, and each year the world waits with bated breath to learn of the success of this crop.

When I was a boy on the farm I often found ears that were only partially filled with kernels. I noticed that some of the ears of corn possessed no kernels. I did not at that early day stop to inquire why certain ears of corn should be partially or wholly barren of kernels, but recently scientific men have asked this question and have settled it. They say that these barren ears of corn are produced by inbreeding, the same as defective cattle or poultry are produced by inbreeding. Inbreeding is caused by the farmer using year after year the seed corn from his own fields. The remedy lies in using half of the seed corn for a certain field from your own growing and half the seed from that grown in a different county or state. By mixing this local grown seed corn (of the same variety) with corn grown at a distant point and planting it in a certain field, you will avoid the lack of pollen which occurs where the seed corn comes entirely from your own growing or your own field. You can add to the productiveness of your corn crop by giving heed to these suggestions.

Youth and Age.

Shakespeare says that crabbed age and youth cannot get on well together. This is sometimes true, but there are many aged people who are not crabbed, and who are the favorites of young people and make themselves agreeable to the young.

The old saw says that young people think old people are fools, but old people know that young people are fools. Here is another instance of a wise saying that is not always applicable, but no one can doubt that youthful people are marvelously conceited. We can learn this by looking back upon our own early days when you and I, reader, felt assured that we were destined to revolutionize the world in at least a few undertakings.

If we were inclined to scribble, to write snatches of verses or prose, we felt that we would excel Tennyson or Shakespeare. If we were inclined to business deals, we felt assured that great wealth would fill our coffers. If we were inclined to public speaking, we were assured that our eloquence would overtop Daniel Webster's or Gladstone's.

I do not doubt that there are men associated with Thomas Edison, the greatest inventor that ever lived, who have a feeling that Mr. Edison is an old fool and that they, the youth, have more inventive ability than even the great Edison himself.

Notwithstanding the vast wealth built up by John D. Rockefeller and Carnegie, I do not doubt that there are many young people intimately associated with these two distinguished men who think they know more than either Rockefeller or Carnegie about business affairs.

Why has nature endowed young people with such marvelous conceit? The answer is, in order that the world may move on and that greater schemes, greater inventions, greater books, greater paintings, may be the result.

Slowly but surely the conceit of young people receives a shock. As the years go by and the head becomes grey the conceited youngster realizes that after all is said and done he is scarcely above the average of humanity. He finds that no matter what is accomplished somebody else can do the work a little better.

HOW TO LIVE TO RIPE AGE TOLD BY SPECIALISTS.

Halve Food, Double Water, Treble Exercise!

Crisp and pointed are the health rules laid down by the state Department of Agriculture, which has a display of pure and adulterated foods. The exhibit will go a great way, its promoters think, to show the benefits of clean air and moderate living. Here are some of the department's suggestions:

Halve your food.
Double your drinking water.
Treble your exercise.
The first wealth is health.
Man eats to live, not lives to eat.
Live to learn and you'll learn to live.
Success tomorrow through sense today.
A man is often "put out" by what he takes in.
Don't mollycoddle your stomach, but be decent to it.

Comments by C. A. Green:—According to the above advice for long life we should eat only half as much food as we ate in our youthful days. We should drink twice as much water as we drank at the age of thirty years, the water to be taken on rising from bed in the morning, another glass at ten o'clock, another glass at four o'clock, and another glass before retiring. However, an eminent physician tells me that it is possible for elderly people to drink too much water. Water increases the blood pressure, and people having a tendency to hardening of the arteries must be a little careful, but the average person does not drink enough water.

The older we get the more necessity there is for exercise, but exercise must be moderated according to our strength. We should never exhaust ourselves mentally or physically but should take some exercise every day. The old idea that the rocking chair and the fireplace were the proper places for an aged man or woman has passed away. They want to keep out of the arm chair and rove more through the fields, parks or orchards. Surely health is worth more than wealth. A poor man may be happy, but a sick man cannot enjoy himself though he have the wealth of Crœsus.

There are millions of people in this country who eat for the pleasure of eating, whereas they should eat for sustenance, for health, and should continually have in mind that overeating is digging our graves with our teeth. We should learn something every day about health, about God, about nature, and about all the various interesting things that surround us and thus make life enjoyable.

NEVER TIRES

Of the Food That Restored Her to Health.

"Something was making me ill and I didn't know the cause," writes a Colo. young lady: "For two years I was thin and sickly, suffering from indigestion and inflammatory rheumatism.

"I had tried different kinds of diet, and many of the remedies recommended, but got no better.

"Finally, Mother suggested that I try Grape-Nuts, and I began at once, eating it with a little cream or milk. A change for the better began at once.

"To-day I am well and am gaining weight and strength all the time. I've gained 10 lbs. in the last five weeks and do not suffer any more indigestion, and the rheumatism is all gone.

"I know it is to Grape-Nuts alone that I owe my restored health. I still eat the food twice a day and never tire of it." Name given by Postum Co., Battle Creek, Mich.

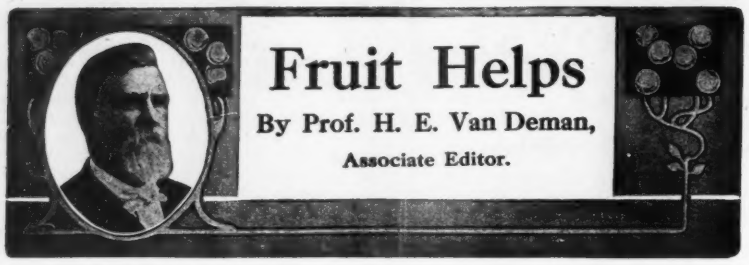
The flavour of Grape-Nuts is peculiar to itself. It is neutral, not too sweet and has an agreeable, healthful quality that never grows tiresome.

One of the sources of rheumatism is from overloading the system with acid material, the result of imperfect digestion and assimilation.

As soon as improper food is abandoned and Grape-Nuts is taken regularly, digestion is made strong, the organs do their work of building up good red blood cells and of carrying away the excess of disease-making material from the system.

The result is a certain and steady return to normal health and mental activity. "There's a reason." Read the little book, "The Road to Wellville," in pkgs.

Ever read the above letter? A new one appears from time to time. They are genuine, true, and full of human interest.



Fruit Helps

By Prof. H. E. Van Deman,

Associate Editor.

THE HOME FRUIT SUPPLY.

How to Have a Home Fruit Garden.

Commercial fruit growing is one of the principal industries of the country today, and those who are engaged in it are generally progressive. This is as it should be, yet there is and always will be room for improvements. But the growing of fruits for home use is far behind what it should be. This is indeed a most lamentable fact, for country people should be and might be well supplied with all kinds of fruits that are suitable to their particular localities. I am convinced that if an inventory of the farms of the entire country were taken it would be found that not one in fifty has a good supply of orchard fruits, grapes, berries, etc., grow- or attempted to be grown on it.

As I am writing these very words while on a trip that has taken me across several states, it has been possible to see many farms just as they occur at random, and I have tried to make careful observations and fair estimates. It has been exceedingly rare that a farmhouse was seen surrounded by orchards and other fruit plantations. The majority of them have a few old, and generally uncared for, apple trees standing on land that is used for pasture, hog lots or grainfields. Occasionally the orchard and garden are combined. In such cases the trees have had better than average care, although it was accidental rather than intentional, and the trees show the result of this care. Pruning and training with intelligence is exceedingly rare, even with the better class of orchards noticed. Spraying and digging out borers would seem to be practically unthought of.

During a run of about three hours just now, when I was not writing but watching for facts, I have not seen more than three or four attempts at growing berry patches, and these were on the edges of towns and on small places. The land is good and the farmhouses and other things indicate thrift, but corn, wheat, cattle, hogs and sheep seem to be the chief means of living. The proverbial "hog and hominy" must be the staple articles of diet, for farmers rarely but fruits either fresh or canned. Many times I have taken meals at costly farmhouses, when I was selling trees in Kansas and Texas years ago, where the fare was almost entirely meat, bread, potatoes and coffee. Eggs and good butter and milk were the exception. At some places the meals were excellent, being varied and well prepared. Traveling through the country by horse, as I did, and stopping from house to house, one can get a fair idea of how the people live. They have plenty as a rule, but there is not nearly the variety that there should be, especially of the fruits and vegetables that might be grown on the farms at small cost.

Farmer's Excuses for Not Growing Fruit.

The average farmer makes the excuse that he has not the time to bother with growing a variety of fruits. He says that the farm crops are what bring in the cash returns and that to plant and care for "fancy things" would never pay. He often says besides that "plenty of bread and meat are good enough for any family," and perhaps may add: "That was what I was raised on."

The fact is that the ideal of good and wholesome living in the country is not high enough. The very people who might live on the best that the world affords do not appreciate it or never know what good living is, taking them as a whole. But this is gradually changing as the telephone the trolley car, the mail carrier, bring the farmers into close touch with the outside world. How can more interest be awakened among country people in growing fruits for their own use? This is a serious and really perplexing question.

Demonstrations in the Home Fruit Supply are Effective.

There is nothing quite so convincing on any subject as success, and it is true of this one of home grown fruits. If one farmer can grow good crops and demonstrate this fact to his neighbors and at the same time have an abundance of fruit of various kinds, it is evidence that others can do it, and this thought will strike home to some of the doubtful ones in due time. They will be slow to learn but time will tell. Gifts of berries or some such thing now and then will have a good effect. An offer of plants and directions about how to set and grow them will induce some to make the attempt to grow at their homes what they have never tried before. The ease with which a fine lot of berries is grown compared with their value and enjoyment at the table will go further than all the verbal arguments that can be advanced. There should be berry growing contests conducted by the boys as there are corn growing contests now, and they would be equally useful.

A quiet but very effective way to introduce the home fruit supply idea is through the women of the farmers' families. They are often willing to make trials that the the men will not attempt. A few strawberry plants or grape vines started by them many be appreciated by the rest of the family. The boys may be induced to make a start if they can be interested enough to do it. The minds of the young are not running in old ruts and are more hopeful of good results than those of their parents. Sometimes they get their advanced ideas from seeing and tasting what their more fortunate associates have at their homes. Or they may get the new ideas from school, for there is an attempt to have the advanced thoughts of country life taught in the public schools. In some cases there are demonstration gardens made and each pupil given a plot of ground to work. It is to be hoped that school gardens will largely increase and that the teachers will be taught as well so that they may give intelligent direction to the work. If the rural children should not be taught of the things they have to work with and by which they are to live, what should they be taught?

Books and Papers on Fruit Growing.

There are so many books and papers now published that treat of rural life that there is no reasonable excuse for not having them. While their help is considerable and is appreciated to some extent, it it is not nearly so well understood and followed as it should be. The quiet but potent effect of a paper that tells of the successes and failures in growing fruits and the reasons is wonderful. No better present to a friend or neighbor can be given for the same cost. Why not do this one little act of kindness that may have lasting and extensive effects? It is a duty that we really owe to the cause of progressive fruit growing, not to mention that to others personally. It is not what some one else can or should do to help along with the good work of the world, but what can we do? We may be able to induce many, or even a few, to avail themselves of the benefits of the reading of progressive thoughts, which may be still better than a gift, but to come home to ourselves and our own duties is something that should not be forgotten.—H. E. Van Deman.

Answers to Inquiries.

Goodell Strawberry.

Prof. H. E. VanDeman:—Two or three years ago you were favorably impressed with the Goodell strawberry as you saw it on the originator's grounds in Seattle. Do you still think as well of it? Has it been fruited in the east and by whom?

I was much pleased with your article on the pedigree question in Green's Fruit Grower. I want some one to tell why sweet potatoes do not run out, although the little ones are nearly always used for seed.—M. Crawford.

Reply: The Goodell strawberry is one of the best varieties that I ever knew, and so far I have never heard of anything but good reports of it, although the tests that I know of have mostly been in the far west. What it has done in the Eastern States, I know very little about and am not sure that it has been widely tested in the latter region. If it has not been tried in the Eastern States, as I think is probably true, this should be done, for it is in both plant and fruit one of the best strawberries in existence. It is above medium in size, very well shaped, never coxcombed and of fine color and rich flavor. Every lover of strawberries should try the Goodell.

The principle of selecting small sweet potatoes for seed may seem very bad, but this is the common and almost universal practice among those who grow them. When I lived in the famous trucking region of eastern Virginia, I had abundant opportunity to observe the methods of the growers, for the sweet potato is one of their main crop, and they grew a crop of very late and small roots expecially for seed. And ever since I can remember my father and all that I knew selected the small roots for seed, with no apparent injury to the crops.

Price of Fruit Farms.

Prof. H. E. VanDeman:—Is the tendency toward higher prices for fruit farms in New York, Ohio, Pa., and other similar eastern states? Is not good land cheaper in these states than in many of the western states, considering all the advantages of being near markets?.

A man wrote me recently that he was thinking of buying a newly planted orchard in Oregon at $1,000 an acre. What do you think of such prices as this as compared with good farms in New York state at $100 to $200 per acre?

Does the inflation of our currency caused by the free production of gold tend to increase the prices of farm land?—New York State Farmer.

Reply: There is no doubt that fruit growing pays in the far west and that it does yield a net revenue on a valuation of $1,000 or more per acre in many cases. But in view of the fact that there are cheap lands in the eastern states that may be had for from $10 to $200 per acre that will produce good fruit and within easy reach of transportation to market, it is at least doubtful if the western move is advisable. I have been over a large part of the West and know by frequent and close obesrvations what big crops are gathered and the prices obtained. The whole atmosphere flavors of progress and the climate and surroundings are delightful and inspiring, for the most part, but calm consideration of the comparative situations will lead one to a belief in the advantages in the East. And the eastern



Winesaps in a Virginia orchard.

lands are increasing in value slowly but surely. I do not think the great production of gold is the cause, but I am not a financier.

Lime for Soil.

Prof. H. E. VanDeman:—I see that lime is being more freely recommended for application to the soil during the last few years. How is that? Has the action of lime not been understood previously? What kind of land is not benefited by the application of lime, and is common air slacked lime as good as any for the soil? —D. E. L., Mass.

Reply: Lime is a plant food and is usually found in sufficient proportions in the average soils of the country to serve the needs of plant growth. This is quite true of the soils that were made by glacial action and these are found over nearly all of the New England States, and westward to the Rocky Mountains, as far south as the Ohio River. The limestone was ground into fragments that vary from powder to boulders and are well mixed with the soil. Where there is not lime enough in the soil, as is the case in many regions, clay and shale predominates, it has been found that applications of it to the soil were very beneficial. That which is fresh and unslacked is far more effective and immediately helpful than that which had been slacked. It has the ability to disintegrate or separate the combinations in the soil that contain potash and phosphorous and so make them available. But lime that has not even been burned, will serve a good purpose and it has been learned by carefully conducted experiments that ground limestone has a beneficial effect on crops in some regions. There is no danger of getting too much unburnt lime in the soil for ordinary farm crops as fruits, but in the burnt or caustic form, about 25 bushels per acre is enough at one time and this need not be applied oftener than every two or three years.

Best Form of Fertilizer.

Prof. H. E. VanDeman:—Generally speaking, for the average farm in New York state, what would you suggest as the most needed form of fertility, that is, does the average farm need most nitrogen, potash or phosphoric acid?—N. O. Smith, N. Y.

Reply: The very best form in which to add fertility to the soil for fruits of any kind or for farm or garden crops is good stable manure. If it is not possible to get this on the farm or from distances that will pay to haul it and at reasonable cost, the next best way is to grow crops that may be worked into the soil. There are many such crops and among them the clovers are very prominent. They add nitrogen to the soil, which is the most needed of all the elements of plant food and the average soil of New York is of this charcater, that is, it is more lacking in nitrogen than in potash or phosphorus. The rag bean is another good soil improver and so is vetch. We do not more than half appreciate the value of these crops.

Mulching Strawberries.

Prof. H. E. VanDeman:—Is it not surprising that after hoeing and weeding a strawberry bed all summer, hundreds of thousands of people reseed the strawberry beds to grass by mulching the roots or beds of strawberries with stable manure, the seeds of the grasses having passed through the animals without injury. What remedy can you suggest or what mulch that is free from weed or grass seeds? —Strawberry Grower, Pa.

Reply: The practice of mulching strawberries with stable trash or anything that contained weed seeds is bad. The greatest care should be used to avoid any such thing and yet a mulch is very beneficial to strawberries and should be put on before severe winter weather can injure the plants. Clean straw of any kind is good. In the north it will be made from rye, wheat or oats, and in the far south of rice. Pine needles I have used with splendid results. Where it is available, along salt water fronts, kelp or seaweed is sometimes used, and it is excellent. Mash hay or "cattail flags" cut from low ground are very good materials for mulching. Corn stalks are usually too coarse, but are better than nothing. Forest leaves will do if not put on thick enough to smother the plants, or if removed early in the spring from immediately over them.

Fig Culture.

Prof. VanDeman:—I own several acres of Magnolia Fig trees that were set in February, 1909. They grew and bore well until the winter of 1910-11, when all the trees were cut down to the ground, which also occurred the following (last) winter. The old roots produced several sprouts that grew four to six feet and bore fruit this summer. I contemplate running a Spalding Deep Tilling Machine near these trees, which are planted 17 feet apart in rows the same distance, and breaking out the middles one way, and plant string beans on the plowed land between the fig trees, followed by cow peas and turned under green in August, ready for another crop of string beans. Then sow down to crimson clover, vetch and barley for winter cover crop. This land is black dansy loam prairie with gumbo soil. Now, I wish to know the best fertilizer to use for both beans and figs. At present there is not much humus in the soil as the orchards have had clean cultivation and shallow plowing ever since first planting. Is it best to try to reclaim the fig orchard or to set over with new sprouts? I desire to grow a quick profitable cover crop for spring, summer and winter, as well as to store up abundant supply of nitrogen in the soil. What will afford the food needed for the best results from the figs in addition to that given?—E. C. Robertson, Texas.

Reply: The plan suggested seems to be a very good one. The fig trees as they stand are far better, except in that they are mere clusters of sprouts, than any young ones that might be set in their stead. They will grow vigorously and bear at once, as I know from experience in Louisiana under similar circumstances. The beans, cow peas and crimson clover will add both humus and nitrogen to the soil and stimulate the fig trees so far as their roots permeate the improved part. But their roots are shallow and plowing among them will disturb them, after they have extended into the new ground. Fig trees bear the best with very shallow tillage and often with none at all, because of the shallowness of their feeding roots. Good stable manure is one of the best things for the figs, but any well balanced fertilizer will do well. The leguminous crops mentioned will soon furnish about all that is needed.

Some people are just about as important to the world as the holes in a Swiss cheese.

Antony, the Roman, Descendant of the Cæzars.

THE STORY OF A HIRED MAN.

Compiled by C. A. Green for Green's Fruit Grower.

The Romans have gone down in history as men of great valor both in war and peace. At one time Rome was monarch of the world.

The historical Antony was a notable man immortalized by Shakespear. Antony invaded Egypt, but was taken captive by a woman, Cleopatra, Queen of Egypt, and made her willing slave. While enthralled in the love meshes of Cleopatra, Antony lived a life of luxury and indulgence and returned to Rome conquered.

The Antony whose story I will relate was a Roman, not a warrior, but in some things was greater than Antony of old. He came to this country like others, a poor man, and had a hard struggle to support himself and wife, especially during the first years of his sojourn.

"We have no milk for the coffee," said Tony's wife.

"Let me tell you about milk," replied Antony. "Milk is full of microbes. Use no milk and escape the microbes."

"We have no butter for our bread," said Antony's wife.

"Let me tell you about butter," replied Antony. "The eating of butter makes us billious. We will escape billiousness by omitting butter."

"We have no meat," said Antony's wife.

"Let me tell you something about meat," replied Antony. "No animal is free from poisons, therefore if we eat meat we are filling our bodies with poison, therefore let us eat no meat."

"We have no oysters," said Kate.

"Here is my objection to oysters," replied Antony. "Oysters may have been fattened in the bay of New York, and made poisonous by consuming the sewage of that great city. Eat no oysters while the sun continues."

"I do not feel that we are able to buy grapes, apples or pears," said Kate.

"I can tell you something about those fruits," replied Antony. "There is no danger of contracting disease by eating fruits. They are not filled with germs as are milk, meat and oysters. Fruit is satisfying and nourishing. I have found when working at the fruit farm after eating a few clusters of ripe grapes I required less food of other kinds than usual. I found the fruits remarkably satisfying and they have sustained my strength and renewed my vigor. I don't agree with you when you say that we can't afford to buy these fruits for I consider them the cheapest food we can eat if they are bought right. Don't be afraid to spend ten or fifteen cents for a basket of grapes or fifty cents for a large basket or box of apples. Such a basket or box may save us several dollars in doctor's bills."

GOING TO THE FAIR.

"I have a plan on foot that I am sure will please you Kate. We are going to the Fair tomorrow night."

"But that will cost fifty cents each and we cannot afford it," replied Kate.

"Yes we can afford it for it will add pleasure to our lives and give us something to think about all winter."

"We have just $2.50 in the house," said Kate. "I will put away $1.50 of this for emergencies and leave you $1.00 for the Fair."

Then came a tapping at the door. It was the man with the laundry. "How much is the bill?" "Twenty-five cents." This Tony paid.

The laundryman had been gone but a few moments before there came another tap at the door and the grocer appeared with a bill. "How much is it?" Fifty cents." This was paid by Antony.

The grocer had been gone but a short time before there came another tapping at the door and a poorly clad, half starved girl appeared and asked if Antony could advance her twenty-five cents that was not yet due for some service which she was to do for Antony. Antony paid this bill and looked askance at his wife, remarking, "Where now is the money for the Fair?"

"Let me tell you something about Fairs," remarked Antony. "It not only costs money which we need to go to Fairs, but there is always a crowd there that prevents our getting a good view of anything, and we shall have to walk a long way since we have no car fare, so I vote that we give up going to the Fair. Instead let us go to the nearby church and hear the delightful music, which will cost us nothing."

Soon after Antony and Kate were skipping over the pavements toward the church.

"But here is a thought," said Antony. "Supposing they pass the contribution plate?"

"We can pretend we do not see it." replied Kate.

"Yes, but we could not deceive ourselves in that way and would feel cheap if we could put put a penny or two on the plate. I say let's sit on the steps of the church where we can hear the music about as well as though we were inside."

VISIT OF THE STORK.

Antony's wife was sent to the hospital, an addition was expected in the family. At this time Antony was sent to a distant town by a contractor to help dig and delve as laborers do. When he came back a month later, he hastened to the hospital with his pockets full of gifts for the baby boy. There was a Teddy bear, a rubber doll, a rattle box and a big stick of red candy, items of no practical use to so young a babe, but Antony was inexperienced in buying presents for so young a child.

Arriving at the hospital, Tony explained who he was and whom he was seeking. On looking up the records, he was told that his wife and babe were dead. Then there was rage in Antony's usually peaceful eyes and he leaped up saying "You have killed my wife and child!" So you see that Antony, like the Antony of old, was impulsive.

Who can realize or set forth vividly the sufferings of a husband and father on learning suddenly that he is bereft of all that he holds dear on earth.

Antony was advised to go home and make the most of his troubles. Who can escape trouble in this world? No one. Every human being has his burden which he alone must bear unaided, for who can fully sympatize with the man who has lost his wife and child.

"Home," replied Antony. "I have no home. I can go back where I have lived, but it is no longer home without my wife and child."

Antony thrust his hands into his pockets and drew forth the presents that he had intended for his babe. He cast them upon the floor and was leaving the room when the doctor reappeared and called upon him to stop. "A mistake has been made. Your wife and babe are living."



ANTONY, THE HIRED MAN.

At Green's Fruit Farm we called him Tony. He was a handy man. He could do many things well. Though he was a Roman he had not spent all of his time in a city. Boys brought up in the city are not usually handy men. They cannot handle a saw, chisel, plane, hammer, pick-ax, shovel, hoe, plow, or other farm tools skillfully and do not seem to learn easily how to do things. Such boys can scarcely learn how to drive a horse. But Antony knew how to do many kinds of work.

Antony was strong. He was about the strongest man we ever employed. He seemed never to get tired even at the hardest work. He was always on time in the morning and was not particular about stopping work when the bell rang at night. He was quiet and orderly. He had no long stories to tell, thus delaying his own work and preventing others from attending to their work. It was soon discovered that Antony could be trusted and he was appreciated. No matter what we had for him to do, he seemed to be willing and able to do it. If we had a job at painting, he could handle the paint brush skillfully. If we had a job at papering a house, he was skillful in removing the paper, in preparing the wall for the new, and in applying the new paper. If a ditch or tunnel was to be dug to connect with the sewer, if the garden was to be filled or the lawn mowed or graded none were so skillful or enduring at this hard work as Antony.

ANTONY AS A CHURCH MAN.

How little we know about the inner life of our hired men. We see what they do, we see how they look, how they dress, how they act. We know whether they are trustworthy or whether they need watching. We know whether they are tricky or reliable, whether they are agreeable or overbearing, but about their lives after they leave our offices, workshops or fields, we know less than we should.

One night the church of which I am an active member was giving a reception to its new pastor. The elite of the city was present. It was a dressy occasion and a social affair of more than ordinary interest.

As I was coming up from the cloak room, the outer hall door opened and I saw two men enter. One of them was Tony. He was elated and wonderfully glad to see me. He had been absent from my place for several months. He introduced his companion as the pastor of an Italian mission church. My own church is deeply interested in this Italian church and has assisted it in various ways, therefore I was glad to meet its pastor. I was pleased to introduce the Italian pastor and Antony to my friends. They were welcomed by the pastor and his wife and seemed to enjoy the occasion. The hired man was not agressive nor out of place. He bore himself with dignity.

Taking me one side, the Italian pastor explained that Antony was one of the leading men in his church. He had first discovered Antony listening to the street preaching of the Salvation Army. The pastor inquired if I could not promote Antony and give him more permanent employment. I replied that possibly I could at the Green's fruit farm. "O, I would not like that!" replied the pastor, "For then I should lose Antony from my church and I cannot afford to lose so good a man. He brings into my church many Italians."

This is all up to date about Antony, the Roman, the Italian laborer. Who is there who has ever before read the story of a hired man? Farmers learn more about the men who work for you.

Ignorance Regarding the Different Varieties of Apples.

Many times I have gone into fancy fruit stores in various parts of the country asking the names of fruits offered for sale, and invariably the answer has been, "They are Oregon apples."

"Yes, I understand that they are Oregon apples, but what variety of apples are they?"

Invariably no answer could be given to this question. They may have been Grimes or Stayman's Winesap, Jonathan, Banana, Spy or Ben Davis. The man who was selling the fruit had no knowledge whatever of the names of the varieties of apples or what the name signified as regards quality.

An average man entering this fruit store and desiring to buy an apple to eat out of hand, on looking over all the choice varieties, and being unfamiliar with the names even if they had been plainly marked on each package, would have been likely to pick out the most showy apple he could find, which would probably be the Ben Davis, one of the poorest in quality. After buying this Ben Davis apple he would proceed to eat it and would decide there and then that he had lost his appetite for apples. He remembers when he was a boy he liked to go in the orchard and fill himself with Golden Sweets, Swaars or Early Harvest apples. He remembers how good they tasted when he was a boy, but now they do not taste so good, therefore it will be sometime before he buys another apple.

But supposing the fruit store proprietor has knowledge of the fruits he is selling and knows their names and characteristics and sells this man a Banana apple, a Jonathan, a Stayman's Winesap, ripe in condition to eat. The buyer departs with this apple in his pocket, for which he has paid five or ten cents, and later proceeds to eat it. Then we hear exclamations of joy. The man discovers that he is exceedingly fond of apples. He does not know that one apple is better than another, but having eaten this apple he decides that he likes apples, therefore whenever he passes the fruit store he steps in and buys an apple, or perhaps a basket, and sends them home for his family to eat.

THE PEOPLE OF THIS COUNTRY NEED TO BE EDUCATED IN REGARD TO THE NAMES OF APPLES AND WHAT NAMES SIGNIFY.

At the present time most people who buy apples or other fruits buy them on account of their beauty. What does the average citizen of this country, whether he dwells on the farm, in the village, or in the large city, know about the quality of many of the best varieties of apples? For instance, what does he know about the quality of Grimes, usually known as Grimes Golden? Why not one farmer in a thousand has ever seen a Grimes apple or a Jonathan, or possibly a Snow apple, although the Fameuse or Snow is better known as a dessert apple than any other. The apples known to the farmers of this country, most of whom are fruit growers on a small scale, are the Baldwin, Greening, Spy and Russet. They have no knowledge of the Melon, Banana, Wisner's Dessert, Shiawasse Beauty, Jacob's Sweet Hubbardston, Albermarle, Wealthy, Winesap, McIntosh, Rambo, Blenheim, Delicious Red or York Imperial.

The question may be asked, "Why do not nurserymen urge the sale of these rare and superior varieties of apples?" The answer is that it hardly pays the nurserymen to bother about propagating rare varieties for there is not sufficient demand for these trees to make their propagation profitable, owing to the fact that planters of apple trees have not sufficient knowledge of varieties to warrant them in buying those of higher quality which we have named.

Then again, planters of apple orchards desire varieties that will give the greatest yield rather than varieties of the highest quality. Often the public is so ignorant in regard to apples of high quality that the home market will not pay any better price for a Melon apple or a Wismer's Dessert than it would for a Baldwin or a Greening, and some of these choicer varieties will not yield so much fruit as the Baldwin or Greening, though some of them do yield just as abundantly.

The point I make is that no one should expect to buy an apple of superior quality with tender flesh at the same price they would have to pay for an inferior apple.

Who is there that knows one variety of orange from another? Not one person in ten thousand in this country. Oranges are oranges and that is all the public as a rule knows about oranges. Practically the same condition exists in regard to apples except that there are many who know about the Baldwin and Greening, the most common varieties.

As regards peaches there is almost as little knowledge of varieties as of apples. People know what is meant when the Crawford' Early and the Crawford's Late are mentioned, and of late years have learned that there is such a peach as the Elberta, but further than this peaches are peaches and that is the end of it.

The annual production of hens eggs in the United States is estimated to be worth $400,000,000, and of that total two eggs in every dozen, worth over $66,000,000 in all, are thrown away; and this waste is due to the careless way in which the farmer carries on the poultry industry part of his business. In the state of Minnesota an effort is being made to reduce this great loss of poultry yard products. The agricultural department of the state university has taken hold of the matter and one of its extension staff is making a specialty of inducing the egg raisers to get their products to market in the best possible condition. He talks the doctrine of fresh eggs to everybody, and the result will be a noticeable improvement in the quality of such farm stuff.

A DOCTOR'S SLEEP
Found He Had to Leave Off Coffee.

Many persons do not realize that a bad stomach will cause insomnia.

Coffee and tea drinking being such an ancient and respectable form of habit, few realize that the drug—*caffeine*—contained in coffee and tea, is one of the principal causes of dyspepsia and nervous troubles.

Without their usual portion of coffee or tea, the caffeine topers are nervous, irritable and fretful. That's the way with a whiskey drinker. He has got to have his dram "to settle his nerves"—habit.

To leave off coffee or tea is an easy matter if you want to try it, because Postum gives a gentle but natural support to the nerves and does not contain any drug—nothing but food.

Physicians know this to be true, as one from Ga. writes:

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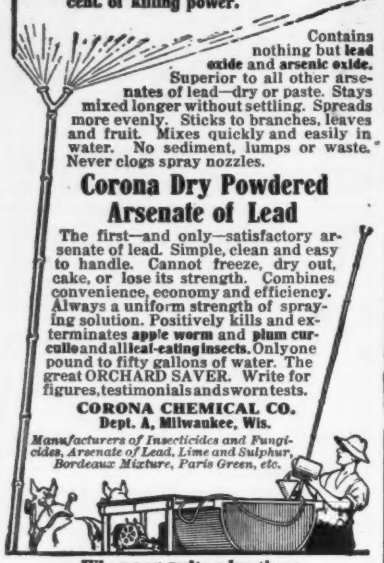
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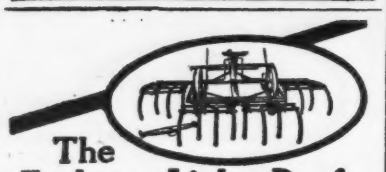
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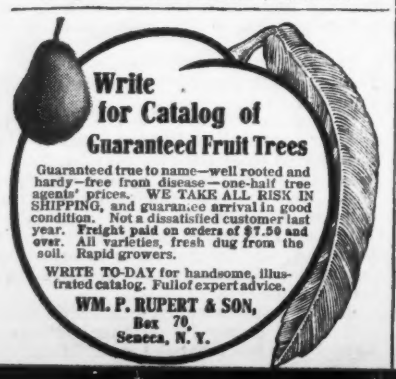


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Effects of Grass Growing in Orchards.

Generally speaking the most successful orchardists favor clean cultivation of orchards. In many of the best and most productive orchards of Western New York you will scarcely find a weed or tuft of grass even in the growing season. On the other hand, I can take you to orchards a few miles north of Rochester along the Ridge Road and show you orchards that are remarkably productive of large and beautifully colored fruit which are growing in sod, the orchards not having been plowed or cultivated for many years. The soil along this Ridge Road is remarkably deep and fertile and of a sandy loam such as does not get very hard in dry weather.

Where the soil is of the ordinary depth and not unusually fertile there is no question but that cultivation is necessary in order to secure the best results. Surely you cannot expect an orchard growing in clayey loam, which in the dry season of July or August is baked as hard as a rock and which is almost impervious to ordinary showers, will produce a big crop of fine fruit without cultivation and with thousands of tufts of grasses growing around each tree, soaking up the moisture which should go to sustain the tree and the house and the soil well firmed or packed with the feet, further sod can be spaded up and inverted near the surface, and these sods will hold moisture remarkably well, acting as a mulch. Instead of watering these trees during the summer months I would prefer having the soil loosened with a fork or hoe every week or two. Where the planter in sod simply digs up a few spadesful of earth, presses in roots of the trees and covers the roots with clods of earth and sods without thorough packing down, and then goes away and forgets all about the planting, he cannot expect great success in fruit growing. But even with such careless planting, if after the tree is set he will tear up the soil over a wider surface and keep the soil cultivated good results may occur.

Plow Deep While Sluggards Sleep.

I have just read an article in a farm magazine urging that soil which has never been plowed deeper than four inches be plowed eight inches at the next plowing.

At Green's Fruit Farm we would not consider this good advice. We would not consider it wise to throw up a large amount of the clayey subsoil in any one season. We favor deep plowing, but where the soil has always been plowed to a shallow depth we would consider it a disadvantage to the crops of the next few years to have the depth of the plowing doubled in any one year. But we would not be afraid to turn up half an inch or possibly an inch of the subsoil in one season.

Bear in mind that subsoils vary in texture and composition, some being sandy, others loamy, others stiff hard clay. Where the subsoil is tenacious clay it would be doing the field an injury to throw up much of this clayey subsoil during any one season.

Where it is found desirable to plow the fields deeper than ever before and to throw up considerable clayey subsoil, it would be well to do this plowing in the fall so that the subsoil which naturally would be left on the surface will be reduced to fine dust by the action of the winter's frosts.



It is not easy to show up apples on trees by photography. The above Wisconsin apple tree is filled with fine fruit but the fruit is so dark it is not easily distinguished from the leaves. The photograph is used to illustrate reasonably good pruning and shaping of an apple tree. I know of nothing which will give a more thrifty appearance to a farm than a young apple orchard. Even though it is only a few acres in extent, the apple orchard tells of thrift and prospective profit. How little it costs to start an orchard. There are about fifty trees to the acre, which at the present price would cost about $15.00, and yet a small orchard is likely to increase the salable value of a farm $10.00 or more per acre for the entire farm.

to enable the tree to perfect its fruit.

As far as my experience goes the cherry tree will succeed better in sod, grown without cultivation, than most other fruits, but it cannot be denied that while the cherry will produce abundantly without cultivation, the fruit will be larger where cultivation is given.

At Green's Fruit Farm we plant the standard pear and the cherry along the line fences, often within a foot or two of old stone walls. There is danger of mice and rabbits injuring trees thus planted, therefore we have to bank up around each tree with earth each fall to protect them from these animals. The soil along these old fence lines is more than ordinarily fertile, and where there is a stone wall close by the wall acts as a shade and mulch, keeping the ground moist and friable, and into this moist earth the roots of the trees soon feed, therefore we get good crops of fruit from trees thus planted which receive no cultivation.

Many people in cities and many farmers plant the fruit trees intended to supply the home table in the yard about the house, which is always in sod. Such soil is usually fertile, not being cropped, and if not so it is not difficult to enrich the soil by manure or soap suds or other things from the kitchen, therefore fruit trees on these home garden grounds are usually remarkably productive. When planting trees in the sod on the borders of the home lot the sod should be dug up and inverted over a space three or four feet, in the center of which each tree should be planted. After the tree is planted on the sod ground not far from

DREAMLAND FARMS.

Men Found Without Heads.

The readers of Green's Fruit Grower will notice that many strange experiences are met with in visiting Dreamland Farms. Possibly this may be one of the most remarkable of all of the Dreamland visits.

My guide informed me that he would take me to an island where I would see remarkable things. I had seen so many interesting sights in my visit to the different Dreamland Farms, I felt that I could not be greatly surprised at anything I might find even on this marvelous island.

It took us a long time to reach the island. I saw men fishing, hunting, plowing, sowing, reaping.

"What is the matter with these men?" I asked of my guide.

"What do you mean?" asked the guide.

"Why these men I see around me appear not to have any heads!"

"You are right," replied my guide. "These people possess a beautiful island with fertile soil, with streams flowing through every valley, but they have no heads."

"How did they happen to lose their heads?" I asked.

"Well it seems to be about like this. These men at one time had heads the same as other people, but they did not use them. It is a well known fact in physiology that if any animal has faculties or organs which are not used, they will in time become weakened and afterwards utterly disappear."

"I notice that these people have large hands and feet."

"Yes," said the guide. "They have used their hands and feet and these have grown large and strong. If they had used their heads, their heads also would have become strong and well developed, but it seems difficult for human beings to use both their heads, their hands and their feet. If they use their heads they are apt to neglect the work of their hands, and if they use their hands they are apt to neglect the work of their heads."

"Do these people cultivate the soil profitably on this island?"

"No, not of late years," replied the guide. "There is a legend that in early days when the men used their heads they succeeded in growing good crops and in marketing them at profitable prices. But they formed the habit of using their heads less and less, thus gradually the profits disappeared until now they can barely exist with no opportunity to indulge in luxuries or pleasant pastimes. They have chosen to work only with their hands and feet. There are so many who work with hands and feet, there is much competition and not much profit."

"I see that the orchards are leafless. Why should they be so at this growing season when they should be covered with leaves?"

"The insects have eaten the foliage of these orchards. By spraying with arsenate of lead or Paris green at the proper season, these insects might have been destroyed at an expense of five cents per tree, but this was not attended to, therefore the orchards are likely to perish."

"I see farm machinery piled up outdoors exposed to the sun, wind and rains."

"I was sure you would notice this exposure of machinery. No man with a head on him would waste his money by such exposure."

"Is the land well drained?"

"No. Where a farm is well drained you will always find a man with a head on his shoulders."

"Why are those men moving yonder barn?"

"The manure has accumulated about this barn for many years so that the barn is scarcely approachable. They are moving the barn in order to save the work of drawing out the manure and applying it to the land."

"These are awful roads. I am so tired of being shaken about that I feel like getting out and walking. Don't they work the roads on this island?"

"No, not if they can help it. So long as they can draw half a load and not get stuck in the mud these headless men are perfectly satisfied. They have little regard for visitors like yourself for there are very few of them attracted to this locality."

"I have not seen any schoolhouse during all my ride. Don't they have schools on this island and churches?"

"What do headless men need of schools and churches?" was the reply. "To such men schools and churches are a source of waste of money."

"Why is that man up the road carrying so many tools on his back?"

"That man has been visiting a neighbor and has borrowed his neighbor's tools. It is a common practice on this island for every man to borrow tools of his neighbor. These tools are seldom returned. The result is a temptation to profanity."

"Do the people of this island take many publications devoted to farming and fruit growing?"

"I have never heard of any man here who was a subscriber to a farm publication. These people deep in ignorance think they know everything. The less a man knows the more he thinks he knows. There is no man so wise in his own estimation as the man without a head."

One Dollar will do it. There is a prospect that postage on all periodical publications will be doubled in price. This will prevent some of the liberal offers we are making now of Green's Fruit Grower. At this time we offer you Green's Fruit Grower mailed postpaid Three Years for One Dollar. Delays are dangerous.

Birds as Weed-Destroyer.

Weeds, as well as insects, are enemies of the farmer. Most weeds are short-lived and depend for their continuance on a prolific seed production. There is a class of birds that, in maturity, feeds almost exclusively on weed seeds, among which the grosbeaks, goldfinches, native sparrows, quail and doves are the more important. Probably the greediest seed-eating birds according to Mr. Pratt, are the native American tree sparrow and the chipping sparrow. Their cousins, the English sparrows, however, can by no means be included in the list.

Rats, mice and snakes are the prey of a numerous class of birds, many of which are often hunted and branded as great destroyers of property. If it were not for owls and hawks the country would be overrun with rodents, according to Mr. Pratt. The crow has his place for good as a destroyer of field mice and the farm owl is the night watchman who hunts gophers, mice and snakes.

Not all hawks are useful. Those that circle around in the sky and swoop down with stealthy movement on their prey are great boons, but the darters, those that take their prey on the wing, are ruthless destroyers.

A Smile.

Nothing on earth can smile but man! Gems may flash reflected light, but what is a diamond-flash compared to an eye-flash and a mirth-flash? Flowers can not smile; this is a charm that even they cannot claim. It is the prerogative of man; it is the color which love wears, and cheerfulness and joy—these three. It is a light in the windows of the face, by which the heart signifies it is at home and waiting. A face that can not smile is like a bud that can not blossom, and dries up on the stalk. Laughter is day, and sobriety is night, and a smile is the twilight that hovers gently between both—more bewitching than either.—Henry Ward Beecher.

A man never realizes how much furniture he owns until he comes home late at night and tries to get to bed without turning on the light.

The Nutritive Value of Certain Foods.

Speaking roughly, a quart of oysters contains on the average, about the same quantity of actual nutritive substance as a quart of milk, or a pound of very lean beef, or a pound and a half of fresh cod-fish, or two-thirds of a pound of bread. But while the weight of actual nutriment in the different quantities of food material named is very nearly the same, the quality is widely different. That of the very lean meat or codfish consists mostly of what are called, in chemical language, protein compounds, or "flesh formers"—the substances which make blood, muscle, tendon bone, brain, and other nitrogenous tissues. That of the bread contains but little of these, and consists chiefly of starch, with a little fat and other compounds, which serve the body as fuel, and supply it with heat and muscular power. The nutritive substance of oysters contains considerable amounts of both the flesh-forming and the more especially heat and force-giving ingredients. Oysters come nearer to milk than almost any other commonfood material as regards both the amounts and the relative proportions of nutrients and their food values, of equal weights of milk and oysters, i. e., their values for supplying the body with material to build up its parts, repair its wastes, and furnish it with heat and energy would be pretty nearly the same.

Winter Mulch for Strawberries.

Only in those localities of extreme Winter cold is it necessary to give protection to strawberry plants, however, in places where alternate freezing and thawing is the rule, it is profitable to mulch the plants for Winter protection, the object being to keep the sun from thawing out the plants. Care should be taken that the mulch be not too thick, as there is danger of smothering if it is too heavy. This mulch should be removed to the middles after danger from frost is passed, and put back round the plants before fruiting to keep the berries from getting sandy. In the warmer sections a straw mulch is applied in Spring for the latter purpose.

The condition of the plants should determine the advisability of leaving them for a second season's fruiting. In case they are left, the beds are cleaned up after fruiting and cultivation is started in the middles.

The strawberry will amply repay anyone for the care bestowed upon it. We have not this fruit with us so long as others, but that very fact contributes to the truth of its being the fruit of fruits so far as quality goes.

A Dollar Bill will do it—Green's Fruit Grower mailed to you postpaid Three Years for only One Dollar. Do it Now. *

A Winter Idyl.

The meloncolic days have gone,
King winter's drawing nigh;
The frost is off the pumpkin now—
The pumpkin's in the pie.

Winter Comforts.

Jack Frost is skulkin' round o' nights
To pinch your nose an' chin;
Stop up the cracks, brin in the wood,
Start up the fireplace roarin' good,
An' tell him you ain't in.

—Joe Cone.

The Peach Season in Connecticut.

As was predicted earlier when it came Elberta time the market was eager for them all and price was better than for the earlier varieties, says N. S. Platt, State Pomologist. In ordinary seasons this would not be expected, but this season, as a rule, the Elbertas bore a light crop and the earlier ones like Carman nearly a full one. These while they bear well, look well, are good in size and are really good, do not give very good satisfaction to the dealer and consumer mainly because they are a partial clingstone. They get tired of them and long for something better. I have repeatedly heard dealers long in the business say they would be glad not to touch a native peach till the Mt. Rose came. I am satisfied that on account of the depressed early market which came at a time when I contracted my whole crop, that I received less by ten or fifteen cents a basket on 1,700 baskets than I would have done. Perhaps before long we will have early peaches that are sound and freestone, till then I say go slow on them. We had two or three rainstorms with wind and some of them that caused some loss, only emphasizing the need of keeping them picked pretty close to prevent all the dropping possible. At the close of our Elberta season there were some brought in from New York state of good size and clean but pale in color, cost the dealer $1.80 per bushel basket. They were not attractive, and were marked to retail at twenty-five cents less per common basket then well colored natives.



C. A. Green, Dear Sir: I am sending a photo which must be of interest in the farm Department. The photo is of our son, Webster Thayer and "Tittom." We have had various experiences bringing up waif pigs. Your "Fruit Grower" is of very much interest to both myself and Mr. Thayer.—Mrs. Porter C. Thayer, Williamsville, Vt.

Big Farm Crops This Year.

The enormous sum of $4,171,134,000 represented the farm value on November 1st of the United States crops of corn, hay, wheat, oats, potatoes, barley, flax-seed, rye and buckwheat. With the value of the growing cotton crop and the crops of tobacco, rice and apples, the aggregate value of these principal farm products will amount well beyond five billion dollars.

Upon the preliminary estimates of production and prices announced today the value of the crops figure out as follows:

Corn $1,850,776,000.
Hay $854,615,000.
Wheat $603,639,000.
Oats $476,169,000.
Potatoes $188,501,000.
Barley $120,845,000.
Flaxseed $39,693,000.
Rye $24,370,000.
Buckwheat $12,526,000.

There was an increase in the total value of each of these crops, excepting buckwheat, potatoes, barley and rye. The increase netted $515,057,000 over the value of last year's crops.

Record crops of corn, potatoes, flax-seed, oats, barley, rye and hay were harvested this year. The government's official estimates of the value of the various crops and its final estimates of total production will be announced in December.



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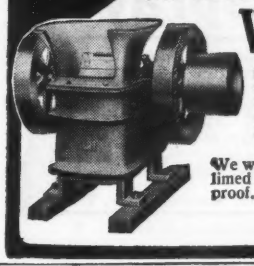
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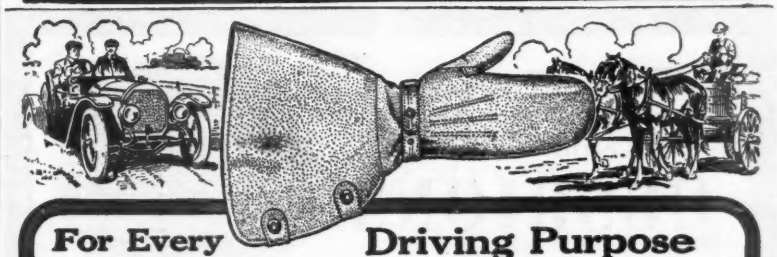
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L. J. FARMER, Box 307, Pulaski, N.Y.

Value of Fruit as Food.

Written for Green's Fruit Grower by Robert Sparks Walker.

This is both a scientific and practical subject. It is one that deserves careful consideration. Every one should know just how much of the various constituents of food that fruit contains. The various constituents of foods are grouped under four heads. They are: Carbohydrates, fat, protein and ash.

The human body requires a certain amount of pure water daily. The average busy man or woman is almost certain to fail to drink it in sufficient quantities. Just what amount is necessary, varies with each individual according to their occupation. The average, however, lies between four and five pints daily. It is a splendid rule to be a little "systematic" in this respect, and ascertain daily if we are providing the body with the proper amount of pure water, that each function of the body may do its work properly, to keep us in good health. Usually two ordinary drinking glasses will equal one pint of water. Then how easy it is for us to calculate the amount of pure water taken into the stomach daily. Some one will ask, but what does water have to do with the subject now under discussion? We must remember that the greater portion of all fruits is pure water. Those, who find it difficult then, to drink a sufficient amount of pure water daily, can make up the shortage by eating ripe fruit. Eating fruit is a most excellent way to provide pure water for the system.

But fruit contains something more than water.

It contains protein, and the various other food constituents mentioned above. The protein furnishes the material for making blood, etc. The ash is the mineral portion, or that which would remain if the food was burned. Carbohydrates are the starches, sugars, etc. We all know what fat is, and the purpose it serves in the body.

Having these four constituents under consideration, it is interesting to take up the various kinds of fruits, vegetables and nuts and ascertain the proportionate amount of these food elements each contain. The following is the composition of food materials of the various fruits and nuts:

Grapes, (edible part)—Water 77.4, protein 1.3; ash, 0.5; fat, 0.2; carbohydrates, 19.2.

Grape juice, unfremented—Water, 92.2; protein, 0.2; ash, 0.2; carbohydrates 7.4.

Raisins—Water, 14.6; protein, 2.6; fat, 3.3; carbohydrates, 76.1; ash, 3.4.

Canned fruit—Water, 77.2; protein, 1.1; fat, 0.1; carbohydrates, 21.1; ash, 0.5.

Fruit jelly—Water, 21.0; carbohydrates 78.3; ash, 0.7.

Apple—Water, 84.6; protein, 0.4; ash, 0.3; carbohydrates, 14.2.

Strawberry—Water, 90.4; protein, 1.0; fat, 0.6; carbohydrates, 7.4; ash, 0.6.

Dried Fig—Water, 18.8; protein, 4.3; fat, 0.3; carbohydrates, 74.2; ash, 2.4.

Banana—Water, 75.3; carbohydrates, 22.0; protein, 1.3; fat, 0.6; ash, 0.8.

Potato—Water, 78.3; protein, 2.2; fat, 0.1; ash, 1.0; carbohydrates, 18.4.

Onion—Water, 87.6; fat, 0.3; protein, 1.6; carbohydrates, 9.9; ash, 0.6.

Parsnip—Water, 83.0; protein, 1.6; fat, 0.5; carbohydrates, 13.5; ash, 1.4.

Celery—Water, 94.5; protein, 1.1; carbohydrates, 3.4; ash, 1.0.

Green corn—Water, 75.4; protein, 3.1; carbohydrates, 19.7; ash, 0.7; fat, 1.1.

String beans—Water, 89.2; carbohydrates, 7.4; ash, 0.8; fat, 0.3; protein, 2.3.

Dry Navy beans—Water, 12.6; protein, 22.5; carbohydrates, 59.6; fat, 1.8; ash, 3.5.

Shelled beans, fresh—Water, 58.9; fat, 0.6; protein, 9.4; carbohydrates, 29.1; ash, 2.0.

Walnut—Water, 2.5; protein, 16.6; carbohydrates, 16.1; fat, 63.4; ash, 1.4.

Peanut—Water, 9.2; carboyhdrates, 22.4; protein, 25.8; fat, 38.6; ash, 2.0.

Chestnut—Water, 5.9; fat, 7.0; protein, 10.7; carbohydrates, 74.2; ash, 2.2.

Peanut butter—Water, 2.1; protein, 29.3; carbohydrates, 17.1; fat, 46.5; ash, 5.0.

Cocoanut (dessicated)—Water, 3.5; protein, 6.3; carbohydrates, 31.5; fat, 57.4; ash, 3.1.

What Food Does in the Body.

Protein is that part which is utilized for building up tissues. Fat is a concentrated form of heat. Serves to yield heat and is stored as fat.

Carbohydrates, are the sugars, starches, etc., but are transformed into fat that yields muscular power, etc., Mineral matter or ash, forms bones, assists digestion, etc.

A balanced ration is one that contains the above mentioned constituents in proper portions.

Good farmers today, and expert stock feeders, feed their stock, usually in weight, a well balanced ration. We are not benefitted by the quantity of food taken into the stomach, but according to the amount assimilated. Is it no wonder at the present time, that we have so many people in bad health, and so many complaining with stomach trouble when they eat most anything, in most any quantity, without any thought as to the need of the system of the body? If farmers have learned that stock should be fed well balanced food, a certain amount and no more, a certain kind and no more; that they thrive on it, keep healthy, and in fine condition, will seemingly exercise no such care over their own persons. And the people living in cities, whose bodies are most all lacking in proper exercise, exercise little will power when it comes to eating. Is it no wonder that we have so many premature deaths, when people will fill their stomachs with iced foods, sweets, and other delicacies just to gratify a growing appetite, which is certain to become abnormal and which brings on stomach trouble and other human ills? When we begin to study these things, govern our appetite, be reasonable with ourselves, and practice temperance in eating as well as drinking, then we can hope to become a healthy nation.

Unripe fruit is unfit for food. Fruit that has been picked before allowing to ripen on the vine or tree, is always inferior, and should be used with the exercise of great care. The Department of Agriculture has recently decided that oranges which have been picked before they are allowed to ripen, and then later placed on the markets is a violation of the pure food laws. There are a number of fruits picked green, such as cantaloupes, bananas, tomatoes in order that they can be shipped without any loss to the grower.

Bananas are unfit for food unless the flesh is very soft, brittle and sweet. As a general rule, the bananas kept by all grocery stores are sold before they are fit for food. It is pre-eminently detrimental to one's health to eat such food, and they should be avoided. The best bananas are those, the peel of which are literally covered with black spots, and these are the ones that should be eaten. They are the ones that we usually find sold in the larger cities by street pedlers.

Suppose you examine a section of apple, banana, orange, peach, berry, or any good ripe fruit under the microscope. You will certainly want to do something to increase the appetite. No other food shows up so well, and looks so wholesome. It is the food put up by Nature, wrapped in a peel protector that insures wholesomeness, provided we have allowed it to ripen. It should be eaten with every meal during the day in liberal quantities. There is nothing to take its place. Many of us would have better health, and a better disposition if we would eat more ripe fruit each day.

There are no germs or eggs of such dreadful things, as tapeworms lodged in pure ripe fruit. If we would eat the proper amount of ripe fruit, the consumption would be more than doubled. In so doing, too, we would increase the great fruit industry in this country to more than double the present production.

NUTS.

The body requires a certain amount of fat. This can be furnished either through the eating of the flesh of animals or through the eating of nuts. You have noticed how difficult it is to eat fat alone—just pure fat? Nature teaches us that this way of eating is wrong, hence it is repulsive to us. Then when Nature stored fats in nuts she mixed it with other constituents to make fat pleasant to the taste. In like manner, when the boy eats his butter, he wants it spread out on the bread so that it will be palatable.

Fruits and nuts should receive serious consideration as every day articles of food. Let us talk their importance to our neighbors and thus help educate the masses as to their value as food and as health producers.

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ABOUT GASOLINE AND GASOLINE LAMPS.

By Dr. A. S. Burroughs, A. B., Ph. D.

The well-established fact that gasoline is an explosive and highly inflammable substance has led many people to believe it too dangerous for use around the house, especially so in rural localities where there are no means of fighting fires when they occur.

The problem of making use of the gas generated from gasoline so that it could be used with perfect safety has been occupying the attention of scientists and inventors for years, with the result that the rural and suburban home may now be lighted more brilliantly with gasoline lamps than the city home that boasts its convenience of gas and electricity, and the cost is much less. A properly designed gasoline lamp is capable of giving a light of about 300 candle power, with the assurance that it is free from any possible danger of crossed wires and from the leakage of faulty pipe-joints and gas jets.

Science has so far solved the problem of economy in these gasoline lamps that this powerful brilliant light may be produced from a mixture of 96 per cent. air and 4 per cent. gasoline, at a cost of only one-third of a cent per hour.

The ordinary kerosene lamp will give a light varying in strength from eight to twelve candle power; that is, it is equal to the light diffused by that number of tallow candles. Now just imagine a light that would be equal to that of 300 tallow candles, or of two dozen of the old style coal oil lamps, or 18 incandescents electric lights, and you will be able to form a correct idea of a 300 candle power light such as is now possble from the gasoline lamp which science and mechanical ability has given us.

Exceedingly cheap gasoline lamps should be avoided, also because the necessities of a real safety lamp require that it should be strongly constructed, so that the font will withstand air pressure of at least eighty pounds, even though a pressure of only about ten pounds is required, thus giving an ample margin of reserve strength to insure the maximum degree of safety under all circumstances.

—o—

CIVIL WAR REMINISCENCES.

A Notable Acheivement.

Editor Green's Fruit Grower:—I just came across the account of Col. Belden Allen's 50th New York Infantry, Civil War Service, in yours of June, 1911. I wish to add to his statement that the regiment which crossed the Rapahannock river above the old Lacy House, north bank of the river, at the time of the Burnside campaign in December, 1862, and drove out the Confederate Sharpshooters from the Stone Slaughter House, south bank, and made it possible for the 50th New York to lay the pontoon bridge, was the 7th Michigan Infantry, 3d Brigade 2d Division, 2d Corps. He states that the engineers were balked, that is the enemy killed them off so they only laid the bridge part way across the river.

Gen. Burnside called for voulnteers to cross, drive out the Sharpshooters, and clear the way so the engineers could complete the bridge. Our regiment, about 200 men, Col. Baxter, commanding, moved down to the bank. All got into boats, and the enemy supposing they were coming out to complete the bridge, allowed them to move out to the middle of the river before they opened fire. They were too late. We rushed the boats across with all speed and, leaving a few men to take the boats with dead and wounded back, we rushed at the enemy in the Stone House. After capturing that, we followed up the street, taking prisoners in cellars and warehouses, and were followed by the balance of our brigade, the 19th and 20th Massachusetts, and the 42d New York. By our quick move we made it possible for the 50th New York engineers to lay the upper pontoon bridge above the Lacy House and opposite the city.—Cyril Tyler, 7th Michigan Infantry, Mantan, Mich.

—o—

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DEPT. No. 3

SANDUSKY, OHIO

A New Gift or Premium for Subscribers of Green's Fruit Grower.

Here is a novel premium which should be of interest to the readers of Green's Fruit Grower. It is something new in this part of the world. It has been discovered that the English walnut, so-called, the correct name being the Persian walnut, has been acclimated to Rochester, N. Y., and is grown here successfully.

There are many individuals who have on their city lots at Rochester single specimens of English walnuts that bear fruit every year, which one would have difficulty to distinguish from English walnuts grown on the Pacific coast. A few miles west of Roshester, N. Y., there is a large grove of English walnut trees, many of which are nearly as large around as the body of a man. South of Rochester



Persian (English) walnut tree growing and bearing nuts at Rochester, N. Y., near C. A. Green's home

is a walnut grove of 200 trees, covering 6 to 8 acres, in full bearing. All of these groves and these individual trees that I mention have sprung up from walnuts planted in the soil, much as you would plant potatoes. These trees have not been budded and grafted, and yet they all bear nuts apparently the same as though they had been grafted. One can hardly distinguish the fruit of one tree from that of another.

Mr. Adelbert Thompson stopped at Green's Fruit Grower office when he arrived in this city with a two-horse wagon load of these walnuts, probably the first load of this size ever delivered in this city, or in any city so far north. He said he secured his orchard by planting the sprouted nut where each tree was to stand in the orchard. These nuts grew and thrived, and now he has an orchard of large, productive and profitable trees.

GREEN'S OFFER.

Here is C. A. Green's offer to subscribers of Green's Fruit Grower. All who send 50 cents for one year's subscription to Green's Fruit Grower, or who send $1.00 for three year's subscription, will receive by mail postpaid four of these hardy northern grown English walnuts.

These walnuts have not been allowed to dry out. They have been kept moist in layers of earth, and if properly cared for and planted should produce hardy trees.

Do not delay in sending your subscriptions if you desire this valuable premium.

Fruits in Wisconsin.

Indisputable facts furnish the most convincing arguments after seeing the crop-burdened trees. The most skeptical persons must admit that fine, high-quality fruit can be successfully grown on a commercial scale in the Bayfield fruit district as well as the out-lying districts nearby, where the water protection is found, says Wisconsin Horticulturist.

So firmly grounded is the idea that upper Wisconsin is too cold for successful fruit growing, that oftentimes a personal visit is necessary to convince our people that they had forgotten the wonderful, protective influence of large bodies of water on the adjacent territory. This protected zone must be carefully observed in planting orchards in this north region, else success will not attend the best efforts.

The fruit produced in this region is especially firm and highly flavored, as is generally the case in northern grown products. This character applies especially to small fruits and cherries, thus enabling long shipments with little loss. Unlimited quantities of low cost ice are available for refrigeration of cars used in transportation of the fruit. The very late season of maturity guarantees good prices and a brisk demand.

A Strawberry Crop Worth While.

Lorman Dawson, a Wisconsin fruit raiser, started to pick strawberries June 1 and picked every day from one quart up to 854 a day until July 5, and Leroy Jacobs delivered them at Bloomington, North Andover and Beetown. Leroy is a good man for the business and he has peddled berries a number of years. Here is a record, 6,495 quarts from three-fourths of an acre. If any fruit raiser can beat that let him show his hand. Mr. Dawson has all kinds of fruit started and will soon be able to furnish all the country round all the different kinds of small fruit. He has set out thousands of strawberry plants this season. Mr. Dawson ha made a special study of fruit and has so far made a grand success.

(This item was forwarded by a member but no name of paper or other information. We give it for what it is worth and invite some one to tell a bigger one; says Wisconsin Horticulturist.)

A Policy of Folly.

Some facts were brought out at a recent convention of the National Live Stock Exchange, at Portland, Oregon, which are construed in some quarters as having a direct bearing on the high cost of beef products. It was stated that of the 28,000,000 of all kinds of cattle that were slaughtered in this country in the year 1910, 4,600,000 were calves, says Democrat and Chronicle. The fallacy of slaughtering immature calves was graphically shown by the fact that a lot of 100 head of one and two-year-old steers brought an average price of $7.86 per hundred-weight, while the average price of calves was $7.60 per hundred-weight. The folly of harvesting potatoes when only partially grown, and selling them for less per bushel than could be obtained for them when fully grown, is at once apparent. It would seem to be even greater folly to sell calves at lower prices than obtain for yearlings.

A Great Fruit District.

Few persons, even among those residing in the orchard district, have a fair comprehension of the vast extent of Western New York's fruit industry. An experienced railroad man whose business it is to keep his road posted on fruit crop conditions along its lines, says that within the area bounded by Lake Ontario, the Genesee river, an air line between Rochester and Buffalo, and the Niagara river, more apples are grown in a normal year than in all of Oregon, and more than in Colorado and West Virginia combined. On January 1, 1912, after a very large part of the 1911 crop had been sent to market, there were still 600,000 barrels of apples stored in the warehouses along the Falls branch of the New York Central railroad. On the basis of 180 barrels to a car this meant a train of 3,333 cars.

But if there were no apple orchards in Western New York, the immense quantities of peaches, pears, prunes, plums, cherries, grapes and bush fruits produced in this district would make it famous as a fruit growing section, says Rural Life.

When the peach season opened, 800 refrigerator cars were in reserve along the Rochester divisions of the New York Central ready to move the ripening crop, and as soon as the picking began on full time, three trains were placed in service to move the crop, starting each morning from points on the eastern and western borders of the fruit belt and ending their runs in the Rochester yard. Two solid trains loaded with peaches were run out of Rochester every night, one going eastward to New York, and the other southward to Philadelphia, Baltimore and the South.

In the Falls road district, the farm products from which are distributed through the Rochester station, there are estimated to be 21,053 acres devoted to fruit culture and an additional area of 25,007 acres will come into bearing within five years. In the Ontario division territory, Wayne and Oswego counties, the large apple centers of the eastern part of the Western New York fruit belt, there are 67,100 acres in bearing and 54,200 additional acres to come into bearing within five years. South and southeast of Rochester are the great apple, peach and grape producing counties of Livingston, Ontario and Yates, all contributing largely to the total fruit production of Western New York.

The fruit industry gives employment to thousands of men, women and children, not only on the farms but in the cities and villages. Every fruit belt village has its basket factory, dry houses, canneries and large supply houses, and the larger shipping points have immense cold storage plants. Rochester, which is the wholesale and commercial center of the Western New York fruit district, owes much of its present prosperity and remarkable growth to the great fruit preserving plants, and many manufactories devoted to the production of sprayers and machinery used on the farms and in the evaporators and canneries.

"Never mind," said the ready-made philosopher, "experience is the best teacher." "Yes," replied the man who is constantly in trouble, "but a person ought not to be expected to stay in school all his life."—Washington "Star."

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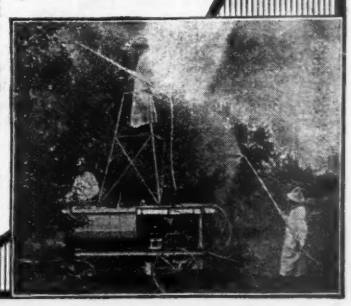
"Made Money by Spraying"

will be sent absolutely free to every farmer or fruit grower. It tells how one man living in the Cumberland Valley, Pennsylvania, had been clearing about $300 a year from his orchard. He started to spray and the first year cleared $1200. Another wonderful example is that of a man living at Mt. Alto, Pa., who owned an orchard of 95 trees. The orchard had been neglected and was covered with scale. After spraying, trimming and feeding, he cleaned up $1600. You can do as well as these men did, and this wonderful book tells you how to do it. It also shows how you can make a profit from the start — how to keep your trees healthy and free from all destructive insects. Gives a wealth of information on how and when to spray your trees. Also describes the

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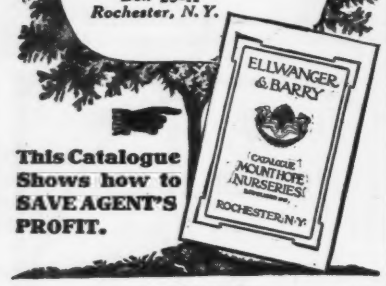
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Scientific tillage makes large crops almost certain. You can grow bumper crops every year by using

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CLARK'S

DOUBLE ACTION HARROWS. They are intensive tillers—They are makers of bumper crops. This is because they pulverize the soil finer than other harrows. Let us tell you how they do it. Ask your dealer to show you a CUTAWAY. Write us for Catalog.

Cutaway Harrow Co., 845 Main St., Higganum, Conn.
Makers of the original CLARK double action harrows



SCARFF'S Fruit Catalog

Fully describes the products of this 1100 acre nursery, fruit and seed farm. Every plant and tree is backed by over 25 years experience in growing and propagating the best and best bearing strains of strawberries, raspberries, currants, gooseberries, blackberries, dewberries, grapes and all kinds of fruit trees. Also garden plants such as horseradish, asparagus, rhubarb, seed potatoes, etc. Do not buy until you see our prices. We supply growers everywhere and our stock is the best of its kind. Send for free beautiful catalog today. A fine currant bush sent free for names and addresses of five fruit growers.

W. N. SCARFF, New Carlisle, Ohio

Orchard Renovation.

A friend who lives in north Iowa, who has recently been in the vicinity of Oswego, N. Y., to pack winter apples, states that there are literally thousands of carloads of apples in New York state in old and neglected orchards that range in size from a silver quarter to a dollar that are not worth anything—gnarly, scabby and diseased. But he also reports that adjoining such neglected orchards are those which have been renovated by pruning and have been cultivated and sprayed carefully, in which there is a nice crop of fruit of good size and fine quality. The writer has never had the privilege of a personal inspection of these New York orchards, but from a knowledge of instances of orchard renovation in central and western states he firmly believes that there is a good opening in the purchase of some of these rundown orchards by men who have the courage to prune heavily and the patience to wait the results. With pruning, fertilizing, spraying, cultivation and thinning of fruit where needed, one would not need to wait long for substantial returns.

Improving the Soil.

To get a large crop yield from a given field, we should not grow the same crop year after year. Different crops are made up of different elements, and all (but the legumes) take food from the soil; but they do not all take it in same amounts or in the same way, says Weekly Star Farmer. Different plants have different kinds of roots, and the process of food-getting varies. By rotating crops we change the soil treatment. As every one knows, some crops require cultivation, while others do not. Even the weeds differ in their manner of growth. Certain weeds have a peculiar affinity for certain crops; thus it will be seen that the same crop year-after-year will give certain weeds a firm foothold—much more difficult to overfrom hundreds of dollars up into the thousands. One young farmer told me he had been offered $4,000 for his apples on the trees, but he held out for more, and I believe got it; another told me that from a small orchard set just nine years ago he had picked an average of seven barrels to a tree.



Young Canada Red Apple Tree. The picture shows George Sisson, of Factoryville, Pa., a subscriber to the Fruit Grower for many years, standing near a tree of Canada Red Apples on his farm located in the adjoining town of LaPlume, Lackawanna County, Pa. The orchard consists of 150 trees of different varieties, set fourteen years ago last spring. Previous to this season but little fruit has grown on these trees. Last fall the trunks were thoroughly scraped of all loose bark, and in the spring, sprayed with lime sulphur solution. The increase in yield and quality will pay the expense of the spraying outfit and work many times over. The trees are headed low, and the greater part of the fruit can be picked without ladders. The orchard has been in grass for several years but stable manure has been spread around the trees. Whether the sod should be taken up again is an unsettled question. The D. L. & W. R. R. "cut off" now being built from Clark's Summit to Halstead, Pa., cuts Mr. Sisson's farm in two parts destroying a large number of maple sugar trees, but luckily doesn't hit the orchard.

Shenandoah Valley, (Va.) Apples.

As I write I can see heavy loads of barreled-apples going to the station, and this has been a common sight on all the main roads at all hours of the day for weeks past. It has been rare that one could not hear the rumble of an apple wagon somewhere on the road, says Weekly Star Farmer:

The valley has been experiencing a banner year in choice apples, and I would hardly dare guess how many train loads of York Imperials and Winesaps have pulled out of the Waynesboro station. The Rose Cliff orchards just back of the town limits contain 3,300 trees, which have yielded upwards of 10,000 barrels of choice fruit and a profit of more than twice that number of thousand dollars. A large proportion of these were York Imperials, many of which were sent to European markets. A cablegram from Glasgow, stated that York Imperials were selling in the open market there for $7 a barrel, or a little more than was being paid for the famous Albemarle Pippins. Another shipment of York Imperials were sent to London.

Another orchard just beyond Rose Cliff is almost as large and prolific; while others of varying sizes stretch away through the farming country in all directions. Nearly every farm has its apple trees, and their yields have been sold for come. By changing the crops and methods of cultivation, all this is avoided; the special plant-foods are not so quickly exhausted from the land, and insect-pests are held in check. Rotation has its certain advantages, and should be practiced.

Advice on Praying.

"Now, Brudder Bogas," a trifle severely said good Parson Bagster, addressing a brother who was give. to prolonged and stentorian supplications, "I'm fo'ced to remind yo' dat politeness am dess as fittin' in pra'r as it am in de parlor, and dar ain't no call to holler at de Lawd like he was ea blind hoss; de Lawd's young yit, sah, and dar ain't nuth'n de matter wid his hearin.' And,, ag'in, what counts in pra'r am not length but depth—yo' isn't prayin' des to 'stablish a long distance record. And fuddermo', dar's' no necessity o' tellin' all de news dat's gwine on uhkase de Lawd reads de papers. When yo' goes to de Lawd in pra'r don't stay all day; de Lawd, lemme tell yo', allus has bizness on hand and ain't got no time to visit!"—Kansas City Star.

"How I Made the Old Farm Pay" is the title of an illustrated booklet of sixty-four pages, giving the experience of C. A. Green in starting and managing a fruit farm. Price postpaid twenty-five cents. *



Better Fruit

SPRAY WITH PYROX

NO WORMS. Pyrox kills all leaf-eating insects, codling moth, canker worm and kindred pests.

NO SPOTS. Pyrox prevents or destroys fungous growths, scab, blight, rot, etc., thus producing beautiful,

PRIZE QUALITY fruit. Leading fruit growers and exhibitors like Hardy of N. H., Repp Bros., also Barclay, of N. J., Tyson of Penn., have used Pyrox for years. You know ***their*** record. Pyrox is **THE ONE BEST** spray; smooth, creamy, free from lumps, mixes easily in cold water, doesn't clog the nozzles. It sticks to foliage even through heavy rains, remaining effective for months, thus saving expense of respraying. All ready to use by adding water.

GOOD FOR ALL FRUITS AND VEGETABLES

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We also ship from Baltimore and Cincinnati.

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Tells just what you want to know about selecting, planting and growing all nursery stock. Contains a big list of unequalled bargains. Don't buy until you've read this book. Send postal today.

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The one absolutely sure spray for San Jose is "Scalecide." Used in the best orchards everywhere. Endorsed by Experiment Stations. Will keep your trees clean and healthy and make them yield number one fruit. Better than lime sulphur. Easy to handle. Will not clog or corrode the pump or injure the skin. "Scalecide" has no substitute. OUR SERVICE DEPARTMENT furnishes everything for the orchard. Write today to Department F for new book —"Pratt's Hand Book for Fruit Growers" and "Scalecide" the Tree Saver. Both free.

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Amazing "DETROIT" Kerosene Engine shipped on 15 days' FREE Trial, proves kerosene cheapest, safest, most powerful fuel. If satisfied, pay lowest price ever given on reliable farm engine; if not, pay nothing. No waste, no evaporation, no explosion from coal oil.

Gasoline Going Up!

Gasoline is 9c to 15c higher than coal oil. Still going up. Two pints of coal oil do work of three pints gasoline.

Amazing "DETROIT"

—only engine running on coal oil successfully; uses alcohol, gasoline and benzine, too. Starts without cranking. Only three moving parts—no cams—no sprockets—no gears—no valves—the utmost in simplicity, power and strength. Mounted on skids. All sizes, 2 to 30 h. p., in stock ready to ship. Engine tested before crating. Comes all ready to run. Pumps, saws, threshes, churns, separates milk, grinds feed, shells corn, runs home electric lighting plant. Prices (stripped), $29.50 up. Sent any place on 15 days' Free Trial. Don't buy an engine till you investigate money-saving, power-saving "DETROIT." Thousands in use. Costs only postal to find out. If you are first in your neighborhood to write, you get Special Extra-Low Introductory price. Write! (188)



Cylinders cannot carbonize

Detroit Engine Works, 191 Bellevue Ave., Detroit, Mich.

Some Farm Statistics.

Statistics with reference to mortgage indebtedness of the farms of the United States are given in a report soon to be issued by Director Durand of the bureau of the census, department of commerce and labor. The report was prepared under the supervision of John Lee Coulter, expert special agent for agriculture.

The total number of farms in the United States operated by their owners, which were mortgaged in 1910 is 1,327,439; while 2,621,283 were reported as free from mortgage. These figures show an increase since 1900 of 17.7 per cent. in the number of farms mortgaged; and of 4.4 per cent. in the number of farms free from mortgage. The report will show that 58,104 farms were operated by managers—a decrease of 1.7 per cent. since 1900, and 2,354,676 farms were operated by tenants, an increase of 16.3 per cent. since 1900. No statistics pertaining to mortgage indebtedness were secured for farms operated by tenants or hired managers. It would be practically impossible in many cases to reach the owners of such farms to ascertain the facts.

The total value of the land and buildings of the 1,006,511 farms for which both the fact of mortgage indebtedness and its amounts were reported was $6,330,000,000, and the amount of debt was $1,726,000,000 or 27.3 per cent. of the value. The corresponding proportion in 1890 as shown in the reports was 35.5 per cent. There was thus, during the twenty years a marked diminution in the relative importance of mortgage debt on the farms mortgaged, due primarily to the very rapid increase in the value of the land in farms. The average amount of mortgage indebtedness per farm increased from $1,224 in 1890 to $1,715 in 1910, but the average value per farm increased from $3,444 to $6,289 and therefore the owner's equity per farm increased from $2,220 to 4,574 or more than double.

Begin Well.

Finish every day and be done with it. You have done what you could. Some blunders and absurdities, no doubt, crept in; forget them as soon as you can. Tomorrow is a new day; begin it well and serenely, and with too high a spirit to be cumbered with your old nonsense. This day is all that is good and fair. It is too dear, with its hopes and invitations, to waste a moment on the yesterdays.—Emerson.

Our Favorite Grapes.

Moore's Early still holds first place in our estimation as the best of early grapes. Campbell's Early, although it has a much longer bunch, is with us fully a week later and it doesn't seem to appeal to the palate of either the farm family or its visitors as does Moore's. This is probably because Moore's Early has many characteristics, strongly reminding one of the best known of the grape family the Concord. Worden again leads the true Concord and all the near Concord varieties. With us it is just as hardy, just as prolific, much larger and distinctly better than the Concord in flavor and sweetness, and to the inexpert, would simply be considered an excessively fine Concord, says Long Island Agronomist.

Niagara again proves superb and a heavy yielder of splendid bunches of big berries. Delaware, the sweetest and smallest of all the grape varieties usually grown, on the Island does splendidly, yielding heavily and producing berries considerably larger than those usually found in the market. Brighton, by far the best of any of the large red varieties does well and keeps in line with the pronounced peculiarities of Long Island things, to date proving of really much higher flavor than normal.

Catawba a late grape but a prime favorite, finds Long Island everything that could be desired, however, we do not hesitate to recommend each and every one of the grapes named above. Personally, our planting would be Worden, for blue grape, Niagara, for white, Brighton, for red and the Delaware for its own sweet personality. Wilder is big as far as individuals is concerned and small as to bunch, thick of skin and not sufficiently marked in flavor to give it a class by itself. Salem, we consider a grape without value. Agawan is a strong favorite with our littlest girl. It has a distinct foxiness not pleasing to the great majority and besides shows nothing to recommend it for commercial purposes.

Apple Storage.

Apples are not a tender fruit and may freeze slightly, though they should not be allowed to freeze hard. Gather apples in the first cool days of fall, though it is sometimes necessary to gather a little earlier if they are falling badly, says W. Va. Farmer.

It will be much better to gather a little early and let them lie in the pens than to remain on the trees when they have started to fall. When they are gathered, put in rail pens and cover with boards, and if there are warm days they should be in the shade.

When the weather becomes so cold that they are likely to freeze, even when protected with a little straw or an old carpet, it is time to store them for the winter, although a great many apples are lost by storing them too soon.

There is no doubt about pits being superior to a cellar for apple-storage. Select a well drained spot, and scoop out a shallow depression not over a foot deep, put straw in the bottom of this pile, then the apples in a conical heap, cover with more straw or hay, then with dirt. They will keep plump and tender this way when they would shrivel in a cellar, though a few for immediate use should be stored in the cellar on the floor.

Exhaustion of Soils.

The effect of continuous cultivation is noticeable upon many of our soils where some special crop has been raised for a series of years without intermission. In parts of the Ohio valley soils, that twenty years ago produced amazing crops of corn without any fertilizing, have deteriorated to such an extent that a fair crop cannot be raised very well. Summer drouths are apt to injure these inferior crops much more than the luxuriant growths on better soil. The same is true in the Northwest where wheat has been raised continuously for many years. This exhaustion or deterioration of the soils has induced some farmers to claim that it is impossible to raise either wheat or corn in these regions as cheaply as a few years ago, and that farmers cannot make a living with these grains at present prices.

Years ago Eastern farmers, or at least some of them, learned the lesson of exhaustion of soils through continuous cultivation, and adaptation to the change has been slow but sure. Today we find Eastern farms that have been in cultivation three times as long as some of these Western farms yielding better crops than those in the Ohio valley or in the Northwest, A recent examination of the soils of these old farms and the comparatively new Western soils showed that the former were richer in plant fuel and humus. A chemical analysis showed that potash, nitrogen, and lime were more abundant in the well-cultivated Eastern soils than in the corn or wheat lands of the West.

This may seem surprising to many Western farmers who have looked upon their soil as the richest in the world, capable of yielding large crops without fertilizing or very much cultivation. But the fact in many cases is overlooked that soils in the West are deteriorating rapidly through the continuous cultivation of single crops, while in the East a systematic rotation of crops is not only retaining the fertility of the soil, but actually adding to it. This, of course, does not apply to all farms, but to the majority of the best cultivated ones. Long ago Eastern farmers discovered that it was necessary to adopt rotation of crops or abandon their farms altogether. They took the only wise course, and their farms are paying investments even in these hard times.

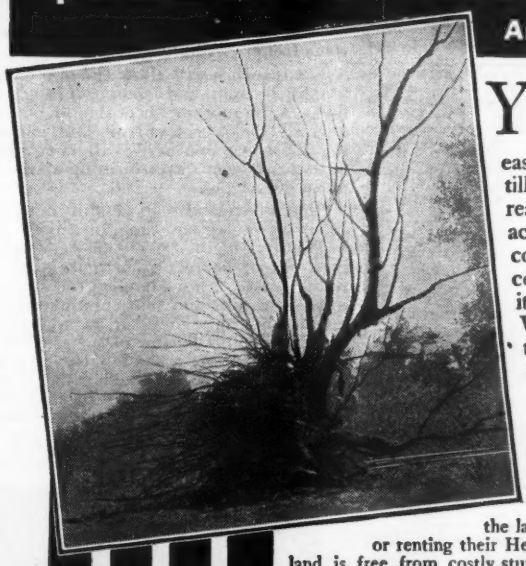
It Wasn't Soap.

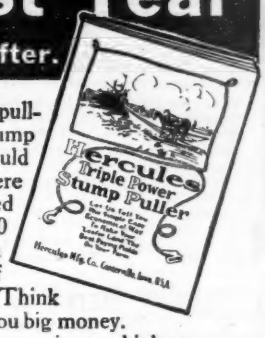
A New Jersey farmer came to the city the other day, and, among other things, he visited a high-class restaurant. His appetite ran to cheese and, inquiring of the waiter what sort of cheese was listed, said he desired "something new." "Why don't you try a bit of Roquefort?" suggested the waiter. "What's that?" asked the farmer. "Hang it," he added, "bring me some. I like the name, anyway. He ate of it and liked it, so he thought he would take some home to his wife. Arriving late, he laid the small cheese wrapped in silver paper on the sideboard. He forgot to inquire about it till the next night and then he asked his wife how she liked it. "Oh, I s'pose it's mighty stylish up to the city, but I jes kinder couldn't use it. I couldn't get no foam out of it, and when I washed the children they smelled kinder funny, and I can't say that I like it."—Scraps.

Usual Way.—"Truth crushed to earth will rise again," but nine times out of ten the automobile gets away first.—Lippincott's.

Your 40 Acres of Stump Land Can Be Turned Into a Profit of $1281.00 The Very First Year

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YOU can double the land value by pulling out the stumps. If your stump land is worth $20 an acre—it would easily be worth $40 an acre if it were tillable. On 40 acres the increased realty value would be $800. On 40 acres of cleared land—*virgin soil*, you could easily raise 1500 bushels of corn—at 50c per bushel—$750. Think it over Mr. Farmer. Stumps cost you big money. With land values going up—and crop prices as high as they are—you *can't afford* to keep on paying taxes for land that doesn't bring in a cent.

This Free Book Proves It

Read how thousands of other progressive men have pulled out stumps on their land instead of buying new lands. They've taken advantage of the virgin soil that the stumps keep away from cultivation. They've paid for their stump puller over and over again the first year with the profits from the extra crops and increased value of the land. And now they're doing contract stump pulling for their neighbors or renting their Hercules Stump Puller at a nice profit. But the main thing is, their own land is free from costly stumps—they farm all their land—and all their acres are at top-notch realty value.



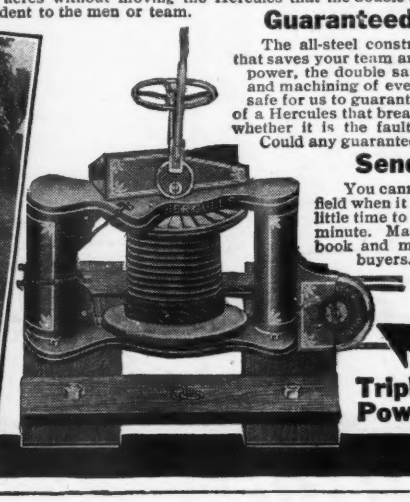
HERCULES

All Steel, Triple Power Stump Puller

It will pull up any size stump, green tree or hedge in five minutes. It will clear an acre or more of stumps a day.

I want you to bear in mind that the Hercules is the only Triple Power, All Steel Stump Puller made: that it can be changed from triple to double or single power in a moment's time without trouble: that it is the only stump-puller having all the working parts machined and finished to reduce friction—hence the lightest draft machine. I want you to remember that the Hercules is 60 per cent lighter and 400 per cent stronger than cast iron or the so called semi-steel or new process steel which are catchy phrases now-a-days used to describe cast iron pullers; that you can clear almost three acres without moving the Hercules that the double safety ratchets absolutely prevent accident to the men or team.





Guaranteed for Three Years

The all-steel construction, the triple power feature that saves your team and gives a tremendous increase of power, the double safety ratchets and careful turning and machining of every part—all these things make it safe for us to guarantee the replacement of any casting of a Hercules that breaks at any time within three years whether it is the fault of the machine or your fault. Could any guarantee be fairer or stronger?

Send In Your Name

You cannot afford to have stumps in your field when it is so easy, so cheap and takes so little time to pull them out. Don't wait another minute. Mail me a postal at once for my fine book and my low introductory offer to first buyers. Address me personally.

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Hercules Mfg. Co.

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Triple Power

Strongest FENCE Made

Made of DOUBLE STRENGTH Coiled Spring Wire. Requires fewer posts. Always tight. Is heavily Galvanized with PURE ZINC.

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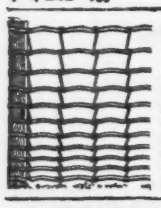
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Special Barbed Wire, $1.55 per 80-rod Spool.

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Steel Farm Gates $2.95 and up. Galvanized Barb Wire, $1.45 per spool. Our large catalogue of fences for every purpose, gates, fence tools and supplies with low direct from factory prices sent free to any address.

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New Year's Resolutions.

Written for Green's Fruit Grower by Pearl Ulilla Davis.

In the early dew-crowned morning when the earth is half awake,
While the amber curtain rises on a day about to break;
Vows of better actions cover all regretful deeds now dead.
Dew-drops falling down upon me from the roses o'er my head
Make me pause and feel a thrilling 'round my conscience-stricken heart.
Striking deep the failings later that have lost the keenest part.
Ties that bind us to the living and the breathing things on earth
Turn a page as though in saying all that's left about thy worth
Is a vanity in striving to out-do which has been done,
Heeding not the hand of justice and in pity to have won.
With the silence deep around me, Nature seems to pause in pain,
Clutching at a chord long broken, now to come in strife again.
Once again I vow to better all the future deeds before,
Thereby gaining full repentance for the misdeeds as of yore;
But in after hours I progress in the same path that I've gone,
All my vows behind like shadows, lightly drifting with the sun.

Storing Fruit Through Winter.

Apples are not a tender fruit and may freeze slightly, though they should not be allowed to freeze hard. Gather apples in the first cool days of fall, though it is sometimes necessary to gather a little earlier if they are falling badly, says The Fruitman and Gardner.

It will be much better to gather a little early and let them lie in the pens than to remain on the trees when they have started to fall. When they are gathered, put in rail pens and cover with boards, and if there are warm days they should be in the shade.

When the weather becomes so cold that they are likely to freeze, even when protected with a little straw or an old carpet, it is time to store them for the winter, although a great many apples are lost by storing them too soon.

There is no doubt about pits being superior to a cellar for apple-storage. Select a well drained spot, and scoop out a shallow depression not over a foot deep, put straw in the bottom of this pile, then the apples in a conical heap, cover with more straw or hay, then with dirt. They will keep plump and tender this way when they would shrivel in a cellar, though a few for immediate use should be stored in the cellar on the floor.

Irish potatoes will stand about the same amount of cold as the apples, and should be buried after the ground gets cold in the fall. Bury about as you would apples, and keep as near the freezing-point as possible without freezing them. It is often satisfactory to keep them in a cellar throughout the winter, and dampness will not injure them unless they become too warm.

Sweet potatoes require an entirely different treatment, it being necessary that they be kept both warm and dry. A temperature within 10 degrees of freezing is fatal to this crop. They should be dug before the frost, or if the vines are nipped by the frost they should be cut off at once, and the potatoes dug the first fair day, when the ground is dry.

This pit must be especially constructed however. Dig two trenches crossing at right angles, and long enough to extend outside of the mound, after the potatoes are covered. Cover these with short boards and at the intersection set a ventilator-flue made by nailing together four pieces of six-inch lumber; heap the potatoes around this flue till near the top, then cover with a little litter of some sort, and on top of this sufficient dirt to protect them from freezing.

The trenches will allow the air to enter at the bottom and escape through the flue. A temporary shed should be built over all this to protect from rain, and during the severe weather it will be necessary to cover the ventilator-opening with straw or an old carpet.

I have never been successful in keeping celery in the cellar, though a little may be kept by digging the bunches and setting in a box or barrel of earth, keeping the roots moist. I have banked the dirt to it in the row, but find that this requires too much handling of dirt, so I always dig the bunches about the time of the first freeze, and after making a shallow trench a foot wide, and as long as needed, set them with the roots down, compactly in an upright position, then bank up the dirt around them.

Draw the tops together, but never use any straw or litter next to the bunches, though some should be placed on the outside of the dirt heap to keep from freezing so that it cannot be dug out in cold weather.

Celery will stand considerable frost, but a severe freeze will ruin it, I usually begin drawing the dirt to it in September, and by that time it is partially blanched, and the stalks held together.

Board-lined pits under an open shed may be used every year, and are convenient for use in storing both winter vegetables and apples.

Why Agriculture Declined.

Commenting on the fact that the East is now competing with the West for some of the crowded-out farmers of the cornbelt, the Nebraska Farmer says: "Having settled the poorest land first in this country, the most natural thing in the world was to have it largely abandoned when better land was found just a little further on. Farmers in the cornbelt could produce crops and lay them down in the East cheaper than Eastern farmers could produce them on the spot."

The concluding sentence of the above paragraph may be true in fact, but it was not due to natural conditions that the "cornbelt could produce crops and lay them down in the East cheaper than the Eastern farmers could produce them on the spot." The Vermont sheep keepers went out of business not because the Western pastures were any better than the green fields of their own state, but largely on account of the fact that the cornbelt farmer could lay down his sheep and wool in the Boston market at a less cost per carload than the Vermont farmer could ship his sheep and wool in carload lots to the same market. There was a time, not so many years ago, when the Illinois farmer could ship his butter to Boston at a lower rate per carload than the Northern Vermont farmer.

Selling On a Falling Market.

The Gleaner tells of a Michigan elevator man who last fall tied up his money in beans. "The crop of beans was large and he could not place them on the market as fast as they came in. He borrowed heavily, and in February had exceeded his credit by a few thousand. He could not get more money, although he was buying on a safe market. 'What shall I do?' he said to the banker, 'the beans are coming in; I cannot refuse them.' 'Reduce the price fifteen cents per bushel; the farmers will then hold them for a better market,' advised the banker. Down went the price. This announcement did not have the desired effect, but exactly the opposite. The farmers thought the market was going to break, and in the next few days this elevator man, backed by the banker, took in over six thousand bushels of beans at the reduced price. He had to make money; you see there was no way out of the dilemma. He now rides in a new red automobile."

When Do Fruit Buds Begin to Form?

By C. A. Green.

It is not generally known that most fruit buds on plants, vines and trees begin to form and assume shape in early summer or late spring almost one year previous to their enfolding or blossoming. It is important that you should know this provision of nature which begins the formation of a new crop of fruit before the present crop of fruit is harvested, for this will teach you the importance of cultivation and attention the year previous to the present fruiting season.

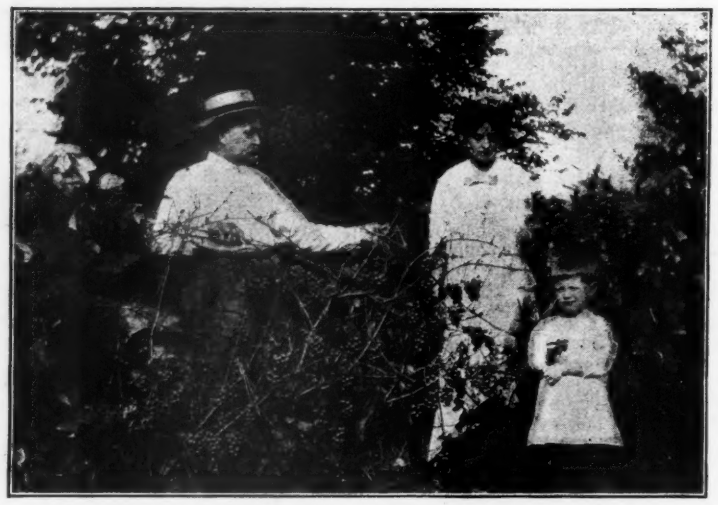
Most people are possessed with the idea that if they cultivate and care for the orchard when the present fruit crop is setting or maturing they are doing all that is necessary to protect and promote the coming crop, whereas they are oblivious to the fact that they have done nothing for the succeeding fruit crop. Here is indicated the importance of annual cultivation, for if the orchard is left uncultivated one season there is a crop of buds in formation which is to bear a crop the next year and which needs the full vigor of the trees to promote its best development.

Fruit and leaf buds are marvelous products and should be carefully studied. It is through the leaf buds which are removed from one tree and inserted in another by budding or grafting that the propagation of trees is carried on in nurseries. If you examine a tree at this time of year you will see numerous leaf and fruit buds, but there are myriads of other buds which you do not see and which will not appear unless some accident happens or a branch is severly broken or cut back. When such an event occurs new buds that have been lying dormant under the bark of the branch or body, will start pushing their way through the top bark and will make new branches. These buds are called adventitious buds.

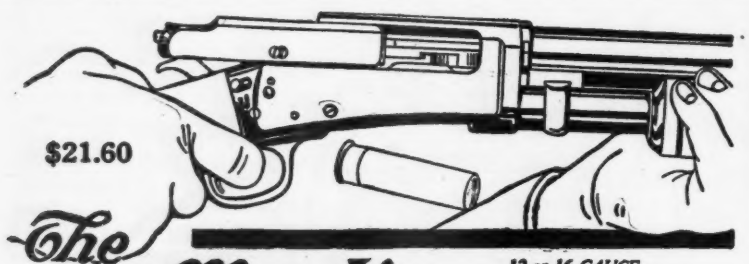
If you will examine your strawberry plants during the fall or winter months, you will find that the germ of the coming strawberry crop already exists in the crown of each plant, and that the warmth of May and June is all that is necessary in unfolding the buds which now exist and which have been in the process of formation all summer. The same is more or less true of the fruit buds of trees and vines.

The importance of early cultivation in the spring has been noticed by many orchardists. If the soil is not cultivated as soon as it becomes dry enough to crumble, the most important part of the growing season is lost and coming crops of fruit are impaired owing to the fact that the forming buds at this early season are affected by the condition of the trees and by their capacity to take up nourishment and to progress with speed and vigor.

Griggs—"This morning I caught a fragment of conversation between a native and a foreigner. The former was saying: 'The "o" remember, is pronounced like "i" in Jim.' What word do you suppose he referred to?" Briggs—"That's easy! 'Women,' of course."—Boston "Transcript."



O. M. Huestis, D.D.S., a subscriber to Green's Fruit Grower with daughter and grandson picking grapes.



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Small Fruits

Next Year's Strawberry Patch.

One of the hardest things to do this year is to keep the strawberry patch clean. The grass and weeds keep on growing, no matter what effort is made to prevent it. Even persistent hoeing and cultivating have not been able entirely to eradicate them, says Farmer's Guide. The work will doubtless have to be continued until late in the fall if a crop of strawberries is wanted next year. The fight with weeds has been kept up for five long, weary months and it would be folly to quit now. All of the work that has been done would count for nothing and then would probably be only a small crop of very small strawberries next summer. It is better to keep on, even though it does take considerable time might have been devoted to something else. When strawberry time comes again and a nice crop of big berries is harvested, there will be the satisfaction of having conquered in an almost endless as well as exceedingly disagreeable conflict.

Pruning Grapes.

Grape culture in this country has brought about a great deal of confusion in regards to proper pruning methods. In the early days of American grape growing the European methods of cultivation and pruning were adopted, but with little if any success; for it was soon discovered that new conditions necessitated new or revised cultural methods, says Pennsylvania Farmer.

This condition gave rise to many new methods of pruning, some of which were soon found to be of little value, while others still exist in more or less modified forms. Of this latter class, the so-called Kniffin System is probably the most prominent, since it is so widely used today in many of the most successful vineyards. This system and the post system are so frequently seen that some mention of them at this season should be made, since pruning time is fast approaching again.

Under the Kniffin System a single stem or trunk is allowed to grow up to the top wire the first year and two canes are taken out from side spurs at each wire. The upper shoots are usually allowed to remain longer than the lower ones, more for the effect of symmetry than for any more practical reasons. The bearing shoots are allowed to hang at will, so that no summer tying is necessary, and herein lies one of the chief advantages of this system; it minimizes work during the busy season. The main trunk is, of course, tied to the two wires, and the canes are tied to the wires in the spring.

Yearly pruning consists of cutting away all wood, except a single cane from each spur. It is not essential that the canes selected should be those nearest the trunk, for if stronger canes can be chosen a few inches out on the wire it is preferable. It is important to remove the weak shoots, which start at the trunk, so that all the vigor and vitality of the vine may go into the strong cane chosen for the next season's growth, and it is desirable that all of the side spurs be renewed every three or four years by bringing out a new cane from the trunk.

The number of buds left on a cane is a disputed point, but most growers, as before stated, prefer longer canes on the top wire. On strong varieties it is a common practice to allow 10 buds to remain on each of the upper canes and 5 on each of the lower ones, making a total of 30 buds on the vine. The four canes are generally left hanging over winter and tied early in the spring before the buds begin to swell.

The other common system of grape training—the post system—has one great advantage, namely, that the vineyard may be cultivated both ways; it also saves the cost of trellis. There are, however, serious drawbacks, the most important being that the thickness of the head favors rot and mildew to a great degree. The pruning is done to side spurs which hang freely from the post, and there may be one or two sets of these spurs. Sometimes two trunks are allowed to each post, but this depends largely upon the vigor of the vine and its natural habits.

Grape pruning may be done at any time after the sap has ceased to flow, and whichever system is followed care should be used in making the cuts clean and in following the principles of the adopted system. Don't mix one system with another or invent one of your own, for to do so usually results in a badlooking vine which is handicapped in growth by lack of proper training.

The Quince, A Much Neglected Fruit.

The quince is a much neglected fruit. It seems to be less grown now than a century ago. Varieties have changed but little in a generation. Methods of culture have not been studied, and such trees as exist usually suffer from ill treatment in some neglected corner of the orchard, says Pennsylvania Farmer. But few fruit growers have given the marketing of quinces attention, and the fruit is therefore not well received in the markets. The fact that the fruit cannot be eaten raw, though delicious when cooked, greatly impedes the progress of its culture. When the plant breeder has given the quince the texture of the apple, decreased the number of seeds, and somewhat lessened the very pronounced flavor, it will become a dessert fruit second to none.

The quince is a native of South Europe, where it has been grown 2,000 years. The Greeks and Romans esteemed it highly. "Quinces," wrote Columella, nearly 2,000 years ago, "not only yielded pleasure, but health." Beyond question, the quince was the "golden apple of the Hesperdes." It seems to have first been grown in the city of Cydon, in Crete, from whence comes its scientific name, Cydonia vulgaris.

THE TREE.

The quince tree, properly grown, is not well known, and needs description here. It is a deciduous tree of small size, with crooked branches and a spreading, bushy head. Its habit of growth is slow. The trees rarely exceed 15 feet in height. The leaves are peculiar in being very downy underneath, and in hanging on late in the autumn. It runs easily into the bush form, as we commonly see it, which form is not at all desirable. In constitution, it is less hardy than either the apple or the pear, but somewhat more so than the peach. The flavor of the fruit is better in warm countries than in cold.

The quince merits high esteem as an ornamental plant. Its large white and pale pink blossoms, which appear later than those of other fruit trees, make it a beautiful tree; nor is it less ornamental in late autumn, when laden with its golden fruit. The autumn colors of the leaves are also attractive.

USES.

The quince is everywhere valued for preserves and for the making of marmalades. Stewed with apples or pears it gives additional flavor and piquancy. It is used with some benefit as a remedy for asthma. The mucilage from the roots is used in salves. In Europe the quince is highly esteemed as a dried fruit. Boiled quinces served hot with cream make a most excellent dessert. The canning of quinces is becoming a profitable industry in some parts of the country.

I Guess He Knew Me.

Editor of Green's Fruit Grower:—Does your horse know you? Mine know me. They know my voice and I believe recognize my blue overalls or features, for a neigh tells me often they have discovered my approach before I have spoken a word and all come to meet me. Why don't they wait out near the barn for me? Well, I'll tell you. A horse likes a gentle caress and a kindly word just as well as a human and seems to enjoy it as much. A man on the farm told me the other day that I did not get the amount of work out of my horses I would get if they did not know me. Well, I get enough to make me glad they know me. I don't lay the lash on them while taking a disk along steadily all day, while I ride, no I don't, and if any other man did he would get a gentle reprimand the first time and his money the second time. Does kindness pay? One hundred per cent. Doesn't my horse pull every time I tell him and every ounce he can? Doesn't he do everything I tell him? Isn't he always ready for duty? What more could I expect? He should expect and does receive from me that which is his due. No horse can do his full duty unless he has proper food, shelter and bed. Then with a little kindness added, mixed with an occasional apple, lump of sugar an extra feed of oats, with a free use of comb and brush and you will not be asking some horse-man how to manage your horse.—Paris C. Johns.

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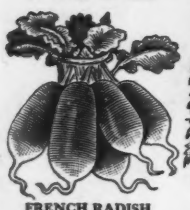
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FARM DEPARTMENT

Supply of Farm Labor.

Competition between agricultural and other employments in determining wage rates confronts the farmer almost everywhere in this country. Hence, it is important to the success of farming operations that depend on hired labor, that they should produce commodities whose prices are high enough to sustain competitive wages on the farm. It is demonstrated in this bulletin that there is at least association, if not the relationship of cause and effect, between high and low farm wage rates, respectively, and high and low average value of product per worker. An examination of the course of prices of farm products at the farm shows that farm wage rates have persisted in an upward movement in spite of a downward price movement at times, as well as during the periods when the price movement was upward, although not in as great a degree.

The increased productivity of human labor by the use of implements and machinery is strikingly stated in the case of corn. From 1855 to 1894 the time of human labor required to produce one bushel of corn on an average declined from four hours and 34 minutes to 41 minutes. This was because inventors had given to the farmers of 1894 the gang plow, the disc harrow, the corn planter drawn by horses, and the four-section harrow for pulverizing the topsoil; because they had given to the farmer the self-binder drawn by horses to cut the stalks and bind them; a machine for removing the husks from the ears and in the same operation for cutting the husks, stalks, and blades for feeding, the power being supplied by a steam engine; because they had given to the farmer a marvelous corn sheller, operated by steam and shelling one bushel of corn per minute instead of the old way of corn shelling in which the labor of one man was required for 100 minutes to do the same work.

Farmers in their collective activity endeavor to produce about the quantity of a crop that they can market at profitable prices. An experience of years gives them a rough sort of judgment with regard to this quantity, but they cannot foresee what the weather will do to their crops. Having made their planting and sowing plans, presumably with fairness to themselves, and also to consumers, the crop suffers unforseen adversities, there is inadequate production, and the general conclusion is that the agriculture of the country is unable to meet the national requirements.

It has been discovered in the investigation of farm wage rates in all parts of the country, and for various lines of agricultural production, that the general fundamental fact is that the higher rates of wages in any community are sustained by the more intensive agriculture. In every part of the country it has been observed that the higher wages and ability to select the better laborers are found on farms managed in the more intelligent ways and on which the cultivation is of the more intensive sort.

The requirements of the farm in the character of the labor employed are changing radically. The labor to be performed by the farmer should be governed by extensive information and considerable scientific knowledge. A successful farmer at the present time may need considerable knowledge of chemistry, of bacteriology, of economic entomology, of the pathology and physiology of plants and animals; of plant and animal breeding, of fungicides and insectocides, of the conservation of soil moisture; of botany, pomology, viticulture, horticulture, and certainly much concerning the practical handling and marketing of his products. The hired laborer does not need to know so much, and yet he should be at least moderately intelligent and well informed. With regard to the future, the forecast is that farm labor will not be recruited in appreciable degree from the city. The farmer would not need to get his labor from the cities if he could hold the country population to the soil, and the recognition of the importance of retaining the children on the farm and of keeping country labor from migrating to cities is governing most of the work by Nation and State in behalf of agriculture. In addition to efforts to promote economic improvement, many agencies are at work upon the country people to improve their dwellings, their modes of living, their home life, and their social activities, which are already beginning to count against the unpleasantness of country life and in favor of making it attractive.—Secretary U. S. Dept. of Agriculture.

The Home Supply.

While I consider orchard planting profitable if wisely pursued. I consider the planting of the home supply of fruit far more profitable than orchard planting. While a man would prize a tree in his orchard for its value as a producer of marketable product, how much more highly will the owner of land prize a tree of Sheldon pears, Montmorency cherry, Hubbardston, Fameuse, or Grime's apple growing near his house and supplying his family with a needed luxury, or as I claim, necessity. How much will be added to the charm or rural life by a strawberry bed or a little patch of raspberries, currants or blackberries. It is my opinion that the fruit garden of the farmer, villager, and even of the city man, needs booming more particularly than any other industry.

If an inventory were taken today of the farms of this entire country, I am convinced that it would be discovered that not one farmer in fifty has an adequate supply of small fruits and of the leading large fruits, such as apple, peach, pear, cherry, plum and quince, growing upon his home ground for the family supply. Is not this a lamentable condition of affairs? Is there any branch of human enterprise in greater need of attention?—C. A. Green, Rochester, N. Y.



Beechwood Farm. Home of Edward Vickery, Auburn, Maine.

Raising Blackberries.

Blackberries need planty of moisture and it will not pay to plant them on the top of some dry knoll; for the fruit will not grow to perfection in such dry places, it will be hard and sour. Choose a place where the ground is of good quality, and where there is plenty of moisture. Prepare the ground thoroughly by plowing and harrowing before planting, and make the ground mellow down quite deep where you set the plants. You cannot be too particular in this respect—remember you are setting them out for profit and not simply to see whether they will grow or not. I think they should be set about four feet apart one way, and eight feet the other way. Keep the ground loose by constant cultivation, and the sooner you can get a good large bush, the sooner you will get fruit, and keeping the ground loose will help to keep it moist.

Pleasure soon palls on those who are in a position to do just as they please.

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Young Man's Road to Success.

By Robert E. Brown, D. D.

"Life is an arrow. Pull the arrow to its head then let it go."

"Life is not rubbish. Individuality is a great factor in this world."

If the artisan, who forms through his blow-pipe the beautifully tinted glass vase or globe, allows the object in its making to fall upon the dusty floor, it will bear the marks of the fall forever. This is something like the act of the boy who wastes his early years in sowing wild oats. He can never fully regain what he has lost. Have a true and ennobling purpose continually in view. There are many misfits in life. Beecher called them round pegs trying to fit square holes. Environment plays an important part in a man's life. A man born and spending his life in heathen China would develop differently than the same man born in this country, spending his life in a far different environment. In choosing a career our circumstances must be considered. A man may have the desire and ability to become an artist, but having a helpless father, mother or sister to support, he may have to content himself with being a salesman and lay aside his taste for art.

Work with terrible interest, as did Bunyan in prison, throwing out of his cell window a book probably next in importance to the Bible. Milton enlarged upon his dream and "Paradise Lost" and "Paradise Regained" were the result. Think of Lincoln in his rude cabin home with no floor but the earth, developing his ability and preparing himself for the greatest service to his country in his mature years.

"Not many years ago," said Dr. Brown, "I was engaged in the business of selling clothing, preaching three times each Sunday in the rural districts. Many times the question had to be decided whether I should continue in business or devote my life to Christian work. Finally I considered it settled that I should continue in business. Later a friend, not a Christian remarked: 'I suppose you will not remain in this store very long.'"

STORE WORK OR PREACHER.

"Why not?" Dr. Brown asked.

"Because you will be enlisted in the ministry."

"I am not so sure of that," replied Dr. Brown.

"But you know you ought not to be here. You know you ought to devote your life to the ministry."

"This remark," said Dr. Brown, "reopened the subject that I thought had been settled forever. The result was that I gave up business and have since accepted the call of the ministry. I do not claim that business may not be made as useful a career as the ministry. I speak of the experience so that young men may see what a trying ordeal it is to decide as to what the life work shall be. If one has a call to a certain line of work, either by special gifts for that work, or a great longing and enthusiasm for that work, he should not fear the obstacles in the way, but should determine to go forward and conquer."

We live in a moral universe. All good work must prevail in the end. You may feel like denying this, for you have seen selfishness and sin seemingly rewarded. You have seen unworthy men achieving fame. Napoleon said that God was on the side of the strongest battalions, but Christ says to us we must do the thing that is right and not the thing that is easiest. There are two ways open to you. One leads to present success, the other to permanent success. But you will say, "I want to enjoy life." I say to you: Do not think that the right life is a sad life. No one is happier than the man who obeys his better instincts, the unselfish man, the man who despises a foolish, shallow life. Professor William H. James, one of the most noted philosophers, has said that anyone asked or impelled to do the right thing, but who opposes or rejects the impulse, loses on every such occasion something of nobility. Put yourself in harmony with the universe. Do these things and your heart will swell with the consciousness that you are doing something that time cannot efface.

Forest Lands Not Taxed.

Several new laws relating to the taxation of forest land in New York State went into effect in April, 1912. These laws give complete exemption from taxation in some cases, and a reduction of limitation of the tax in other cases. In order to get this relief from taxation the land must be used for forestry purposes. It must be planted with forest trees if it is not already well wooded. If it is now covered with brush or with an unsatisfactory stand of timber, it must be under planted, that is, good trees must be planted under existing growth. If it is already well wooded, it must be maintained as a satisfactory forest.

One of the great objections which many people have raised to giving care to their forest lands is that the taxes take much of the profits. By these new laws the State now guarantees reasonable taxation on forest lands that are managed as true forest properties. The State also furnishes trees from its state nurseries for planting, the trees being sold at the cost of production. It is to be hoped that the owners of lands which are not well adapted to cultivated farm crops will see their opportunity and will take advantage of this twofold help in making their forest lands more profitable.

The Department of Forestry of the New York State College of Agriculture at Ithaca is publishing a bulletin giving the details of what must be done in order to obtain tax relief under these laws. This bulletin can be obtained free of charge by writing to the Department of Forestry, College of Agriculture, Ithaca, N. Y.

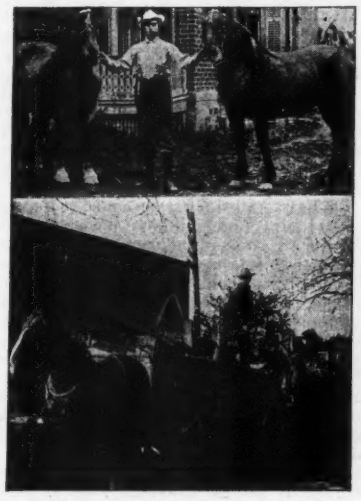
Friendly Chat.

Written for Green's Fruit Grower by Frank I. Hanson.

Home is where there is love and kindness and the many little acts of self denial. There must be peace and contentment or oceans of wealth would not add to the real comfort.

The cellar should be kept perfectly clean. Do not allow rubbish to accumulate or decayed vegetables to remain. These conditions and poor ventilation are disease breeders.

Parents do not always justly consider the natural calling of the boys. More often no notice is taken of the subject. If



In the upper picture our subscriber is showing off his favorite horses. In the lower picture he is unloading cider apples at the cider mill.

he evinces a desire to become a doctor do not encourage him to stay on the farm.

It is dangerous to keep loaded firearms in the house, and it is rarely necessary. Better discharge them before somebody meets with a serious accident.

No boy has the strength or endurance of a man. Therefore see that his work is not too hard or his hours too long. When boys are growing fast they fatigue easily.

Setting spring traps around the farm is dangerous, both to your own cats and dogs and those belonging to your neighbors. More than that it is cruel to the poor victim. If possible catch the animals that bother you alive and put them to death more humanely.

Parents, do the boys and girls enjoy themselves as much as they might? Remember their social life, or the absence of it, will do much toward keeping them home. Why not let them have a house party often?

Many who read this will recall with a thrill of pleasure the old time spelling matches and debating clubs. How slowly the time passed before the eventful night came, and with what zeal they tried to "make good." Let us organize them again.

An amusing story of the mountain people of Kentucky is related by a minister. One day while passing a cornfield he was surprised to see long strings of pawpaw bark knotted together and tied to stumps. He asked his guide what it meant, and was informed that it was "to bring luck."

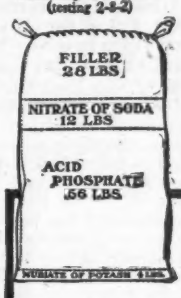
"And does such a foolish superstition exist all over this community?" he asked.

"Oh, no," said the mountaineer; "the old preacher over in the settlement yonder says pawpaw vines don't do no good."

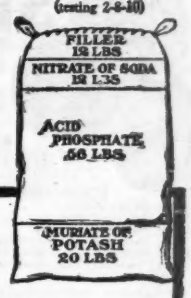
"An intelligent man," interrupted the minister. "I'm glad to find one man who isn't lost in ignorance."

"Yassir," the native continued, "he allows that yarn strings beat pawpaw strings all hollow when it comes to bringing luck. Fact is, he don't use nothin' but yarn strings."

"The time will come," thundered a suffragist orator, "when women will get a man's wages!" "Yes," sadly muttered a man on the rear seat; "next Saturday night!"—Tit-Bits.



Both of these are called "complete" fertilizers, but they are very different.



If you prefer ready-mixed fertilizers, insist on having enough Potash in them to raise the crop as well as to raise the price. Crops contain more than three times as much Potash as phosphoric acid.

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To increase the Potash 4½ per cent. (for cotton and grain), add one bag Muriate of Potash per ton of fertilizer; to increase it 9 per cent. (truck, potatoes, tobacco, corn, etc.), add two bags Sulphate or Muriate per ton.

Talk to your dealer and ask him to carry Potash in stock or order it for you. It will pay you both, for **Potash Pays**

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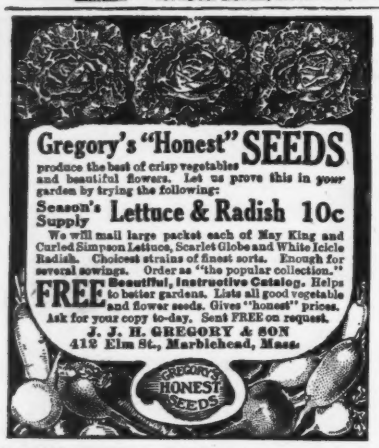
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APPLES AT FORTY CENTS EACH

How a Progressive Missouri Orchardist Secured a Record Price for His Fruit by Putting It Up in a Novel and Attractive Manner.

Guests of one or two of New York City's most exclusive hotels this winter will find that grain-belt apples are an expensive luxury when served in the dining room. The apples are packed in individual boxes and will be listed on the menu cards at forty cents each, says Wisconsin Farmer.

A firm in Lebanon, Missouri, has packed 6,000 apples from their orchard for this exclusive trade, receiving fifteen cents each for the apples at Lebanon. The other twenty-five cents each is margin for freight charges to New York City, and profit for handling the apples. Ben Davis apples constitute the largest proportion of the exclusive pack, but Banana apples, Ingrams, Willow Twigs, Minklers, and Ganos are represented. With several hunderd thousand bushels of apples going to waste in Missouri because they are too inferior to pay for picking and shipping, a great many orchardists will want to know how to make any kind of an apple worth fifteen cents at shipping point. When an abundant apple crop became assured early in the season, Mr. Nelson went to New York to solicit orders for part of his growing crop. Knowing that fancy packing has an important influence upon the trade, he suggested to a commission man that a limited quantity of individual packed apples be tried out on the market this winter, and was successful in getting an order for 6,000. The contract required that each apple be sound, of high color and not less than three and one-half inches in diameter. That at least two perfect leaves must be attached to each stem and that each box should be sealed after the apple was placed in it.

Mr. Nelson had a chemist of Chicago prepare a solution for dipping the apples so that the pores of the skin would be closed to obtain the original flavor of the apple and to keep the leaves their natural color. Young ladies with shears cut the apples from the trees, to secure the necessary leaves. The apples were placed on a cloth-covered table in the orchard for inspection and after they had passed muster, each apple and its leaves was dipped in the solution. As soon as the solution had dried on the apple, it was carefully wrapped in soft tissue paper, by young ladies who took particular care not to bruise the apple. The leaves were left outside of the paper, which was used more to keep the apple from being jarred in the box than for any other purpose. After each apple had been securely placed in its box, the leaves were arranged so that they would not become bent or twisted and the lid was put on and sealed. The name of the growers and of the variety is printed on each individual box. Twelve of these are packed in a fancy pasteboard carton and six cartons make a case for shipping. The apples will be shipped to New York in refrigerator cars and placed in cold storage until required by consumers.

Mr. Nelson also secured an order for 1,000 boxes of twelve apples each for exclusive family trade, for which he received fifty cents a box at Lebanon. These boxes will retail for one dollar each, the majority going to New York, but a part of the order will be tried out in St. Louis and part of it in Chicago. These apples are standard grade without leaves attached and have not been dipped in the special solution. Each apple is wrapped in soft tissue paper and placed in a compartment of the pasteboard box. The name of the growers and of the variety is printed on the top of the box and six of these boxes make a case for shipping. All of these two exclusive packs have been handled exclusively by young ladies employed by Mr. Nelson.

As Nelson & Son have an orchard covering one hundred acres, they had about 150 carloads of apples left after taking out the special orders. They packed some four or five thousand barrels of special fancy apples to put in cold storage for the holiday trade. Their crop is so much better than ninety per cent. of the apple crop in the state because they have taken care of their orchard and fed the trees fertilizer containing the ingredients which the fruit requires. They sprayed the trees three times this season. Most orchardists trust to luck that their crop will be perfect, but the result this season has demonstrated beyond a doubt that luck does not perfect the growing fruit. Trees must have sustenance in the form of humus and nitrogen to mature a crop after it has gotten a start.

Cold Storage of Apples.

We have from time to time called attention to the fact that cold storage is very much superior to common storage for apples and other fruits, says Cold Magazine. Cold storage means storage whereon the temperature can be controlled by artificial means. Common storage is ordinarily known by the name "frost-proof storage" and means any sort of storage space where it is possible to prevent fruit from freezing, usually a basement or perhaps an insulated room above ground.

We have had during the past few years several winters which have been very disastrous to apples and other fruits stored in common storage. When a thaw comes in the winter and the temperature runs comparatively high, the temperature in common storage space also goes up, and it is also impossible to open the rooms for ventilation. This means that the air becomes damp and filled with impurities, and with the comparatively high temperature deterioration is very rapid, and the actual loss in rotten and useless fruit is often enormous.

There is another reason why common storage is not as good as cold storage. Common storage is, in cold weather, generally very much drier than a cold storage room, and this leads to the shriveling or drying out of the fruit with consequent loss of flavor and vitality. Apples especially do not require a very dry air for suitable storage, but the humidity should be controllable with reasonable limits to prevent the formation of mould. Cold storage gives not only a control of temperature, but a control of humidity as well.

Twenty-five years ago very few apples were placed in cold storage, and they were mostly all stored in common storage. Now the situation is reversed.

Important About Nuts.

Mr. Chas. A. Green, Editor:—Replying to third paragraph, page three, column four, current November number, the liberty is taken of pointing out to you that Juglans-regia, i. e., Soft walnut, or Persian walnut, can be grafted upon Juglans-nigra or Black walnut. A tree now four or five years old, thus grafted, is growing on the Boulevard at the residence of Wilbur McEldowney, in Forest Grove, Oregon.

My English acquaintances assure me these walnuts can not be grown in England save as a novelty, when trained against a south wall, owing to severity of climate. This applies to the south most Shirs, or counties.

It might be in order to warn our "Delaware subscribers" that New York walnuts or Delaware walnuts, when seditiously branded "English walnuts," are subject to seizure for "misbranding," in our Interstate commerce.—Geo. H. Schoch, Oregon.

Winter Protection of Young Fruit Trees.

Mulching in spring and summer, is valuable for transplanted trees, but is dangerous in winter, as the straw furnishes a hiding place for the ground mice, which would ruin the trees by eating the bark, says Stockman and Farmer. The winter protection of the young trees should be the mound of earth, a foot or so high and eighteen inches in diameter. In the fall, the mulching is to be drawn back from the tree a foot or more and the mound of earth raised around the trunk, with soil brought from eight feet or so distant. This is a complete protection from the mice.

A pleasant countenance has the happiest effect on the mind, and a smiling face will often lighten a heavy heart.

Dedication of the Saratoga Battlefield Monument at Schuylerville, N. Y., October 18, 1912.

Written for Green's Fruit Grower by Rev. Geo. E. Tilly, Chaplain, Dept. of N. Y., G.A.R.

Today we come to dedicate this glorious work of art,
This Monument Memorial, to those who gave their life,
A lesson to us all, who never should depart
From true patriotism, and love of universal liberty.

Now will we renew allegiance to our flag
Native, and foreign born alike defend,
In our Country's honor we'll none of us lag,
Till the world universal in freedom shall blend.

Oh, God of our Father's, Our God whom we love,
Give thy care o'er our nation, let it no more be riven.
Help Liberty's sons, in true patriotism to move,
All Honor and Glory, to thee shall be given.

About Farmyard Manure.

Remember that the constituents of animal excrements are in the condition of greatest value as manure at the time when they leave the animal after mixing with litter and piled in the barnyard their value is greatly reduced.

During the fermentation of the manure with the straw and refuse of the stable and barnyard, the constituents enter into new combination the ammonia produced which contains the nitrogen combines with the humic acids formed from the decomposing litter, forming insoluble compounds. Thus they are not so quickly available to the plants as the original excrement.

There are also serious losses in quantity which the constituents may suffer before they reach the land. In the yard much urine may run to waste. Ammonia will disappear as gas in the stable during the decomposition of the urine, and further loss of nitrogen may occur in the barnyard.

Apples in South-East Indiana.

We have about sixty-five varieties in our orchard of five hundred trees, ranging in age from five to fifteen years, says Farmer's Guide. From this orchard we will harvest about one hundred bushels of apples. The following are the best yielding varieties: Grimes Golden, White Pippin, Yellow Bellflower, Baldwin and Lansingburg. We purchased some trees of a variety from the northwest five years ago. This year they bore a peck of the largest apples we have ever seen, of a winter variety. They are red in color and of a fine quality; it is named Spokane Beauty.

All our apples are of large size and free from worms. We are now retailing some at Brookville and Harrison for $1.20 to $1.50 per bushel. Some time ago a friend of ours remarked that he used to grow fine Bellflowers in former years but that it seemed as if the Bellflower apple time had now passed, as his trees refused to bear any more. We did not believe in this theory. We went to work and manured our Bellflower trees heavily with barnyard manure, sprayed them thoroughly and succeed in raising as many Bellflower apples as any other variety of equal age trees.

Neighboring orchards here of equal size to ours do not contain a hundred perfect apples in the entire orchard because they were not sprayed. Not one farmer in a hundred sprays his fruit trees in this section. If their attention is called to the matter, they invariably say that "they had too much farm work; no time to spray," and the consequence is wormy and deformed fruit. A farmer who has an orchard of fair size recently asked us for a few apples so he could have at least one good apple pie. Growing apples requires the same attention as any other crop if we want to obtain good results.

Strawberries.—Last fall I prepared a little over one acre of land, first manuring it heavily with pulverized sheep manure and coarse stable manure. On top of this, I spread two or three tons of ground limestone per acre. In the spring this was turned under, and the manure and lime worked thoroughly into the soil. Then this piece of ground was set to plants—about 120 different varieties—and they have made the most wonderful growth that I have ever seen, considering the unfavorable season. The foliage is brighter and cleaner and more vigorous than the plants which are growing where there was no lime used.

Some of the greatest crops of strawberries I have ever grown were grown in soil which had been treated with wood ashes, containing about 30 per cent. lime. I have never found that strawberries have a preference to an acid soil. I have always obtained the best results in neutral soil: that is, neither too sour nor too sweet. The only way that I know of to get the soil into this condition is by the use of lime or wood ashes.

One of the ushers approached a man who appeared to be annoying those about him. "Don't you like the show?" "Yes, indeed!" "Then why do you persist in hissing the performers?" "Why, m-man alive, I w-wasn't h-hissing! I w-was s-s-imply s-s-s-saying to S-s-sammie that the s-s-s-inging is s-s-superb."—Judge.

Fertilizing Orchards.

Badly neglected as the average farm orchard is in almost every particular, it probably suffers worse from the lack of fertilization than from any other cause. It is indeed a rare case where the farmer or perhaps even the orchardist manures or fertilizes his orchard as thoroughly and as conscientiously as he does his corn and wheat ground, says Farmer's Guide. There are thousands of orchards in this state in which the trees have been making yearly efforts to produce a crop of fruit for fifteen, twenty or twenty-five years, without a nickel's worth of fertilizer or manure ever being added. As is being noted everywhere, however, the older trees are slowly giving up the struggle for they have actually been starved until the numerous insect pests, taking advantage of their weakened conditions, are proving too much for them.

Plant food and fertilizers are the paramount issues in considering other crops and it hardly seems consistent that the apple crop should be so entirely neglected. But there are probably well defined reasons for it. In fact, feeding the apple tree is a complex problem. Unlike corn or potatoes the tree grows from year to year; it requires several years before it is ready to bear; there is no chance for a rotation of crops; the tree growth must continue with the production of the fruit; and withal, the problems involved in fertilizing the orchard trees and the various cereals are so radically different that it is little wonder that the farmer often fails to give the orchard the attention he should.

The manurial requirements of fruit trees are but little understood, even by the most experienced fruit-growers. This is not surprising because it was generally supposed only a few years ago that the orchard needed no fertilization and that the trees were amply able to take care of themselves in this respect. Consequently as yet, little actual investigation work has been done as in the case with other plants on the farm.

Large Fruit Crop Reported.

In the Lake Ontario counties of Oswego, Wayne, Monroe, Orleans and Niagara the apple average is 84 per cent., as compared with 61 per cent. in September last year, while the Central New York section, including Yates, Seneca, Livingston, Genesee and Ontario counties average also 84 per cent. as compared to 50 per cent. last September.

Secretary Gillette says that these ten counties grow a very large part of the apples of the state, so while the average for the state is not high, the average for the apple growing district has not been so high in several years. The counties of Columbia, Duchess, Orange and Ulster in the Hudson Valley district, show only 35 per cent., while last September it was 75 per cent. In regard to the price per barrel the report says some dealers are now talking of $1.50 a barrel, but most of the growers want either $2 or $2.50 a barrel.

The report also includes the conditions in some other apple growing states as follows: Connecticut, 60 per cent.; Pennsylvania, about 75 per cent.; Virginia, 70 per cent.; Delaware, 110 per cent.; Massachusetts, 70 per cent.; Vermont, 40 per cent.; Arkansas, 50 per cent.; Michigan, 100 per cent.; Canada, 61 per cent.

Remarkable Results Obtained With
SHERWIN—WILLIAMS
INSECTICIDES & FUNGICIDES



Tree is 38 Years Old

These trees are thirty-eight and fifty years old. In 1910 the two of them produced less than a bushel of apples apiece. During the season of 1911 they were sprayed with Sherwin-Williams New Process Arsenate of Lead and Lime-Sulfur Solution. The result—a bumper yield.

Mr. W. F. Pauly, Apollo, Pa., tells about it in an enthusiastic letter. He says: "The photographs enclosed were taken of two of my fruit-trees. One is fifty years old, the other thirty-eight. They never bore a very large quantity or the right quality fruit, and in 1910 they produced two scant bushels of apples. In 1911 I sprayed them with S-W Arsenate of Lead and Lime-Sulfur Solution, and this past season, 1912, the trees were so overloaded with fruit that I was forced to pick some off to prevent the limbs from breaking. I cannot say enough regarding the effectiveness of S-W Insecticides."



Tree is 50 Years Old

S-W New Process Arsenate of Lead

S-W Arsenate of Lead has many advantages over other arsenical insecticides. It contains the largest amount of arsenic possible to combine in an absolutely neutral, safe combination. In other words, it does not have excess arsenic which will remain free or loosely combined and be liable to cause foliage burning. S-W Arsenate of Lead completely covers and adheres to the foliage, remaining there even when exposed to very severe rains. All leaf-eating insects can be exterminated by its use.



Put up in new air-tight steel containers.

S-W Lime-Sulfur Solution

This product is a clear, cherry-colored liquid containing the maximum amount of sulphur which will combine readily in an absolutely safe solution. It is as strong a preparation as can be made, therefore it is especially effective. S-W Lime-Sulfur Solution is a contact spray and should be used in combating San Jose Scale, etc. It is free from sediment and does not crystallize and clog the spray-nozzle. This solution when properly reduced with water is a fungicide as well as an insecticide. Put up in barrels, half-barrels, also 5-gallon, gallon, half-gallon and quart cans.

Our Spraying Calendar and Guide is just off the press and contains just the spraying information you need. We have a Spray-Pump which can be operated by one man, and our folder describes just how it works. Send for a copy of both.

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1990

Don'ts for the Boys on the Farm.

Written for Green's Fruit Grower by Frank I. Hanson.

Don't go behind a horse or cow without speaking. Neglect to do this may cause fright and the most docile animal cannot be blamed for kicking under such circumstances.

Don't tie the rope around your waist or wrist when leading an animal. Should it become frightened and unmanageable, serious injuries might result, unless the hold could be released at once.

Don't kick the cow or thrash her with the milking stool when she seems cross. Cows are very sensitive creatures and such treatment only makes them worse. Besides being cruel it interferes with the flow of milk.

Don't mistreat dogs and cats. Animals are quick to show gratitude and you ought to be proud to be their protector. A gentle boy is almost sure to become a gentleman.

Don't fail to be careful when around autos or steam cars with the team. Leave plenty of space between you and them. Any chance taken merely to "show off" may mean serious damage or loss of life.

Don't begin the tobacco habit. Cigarettes are especially injurious. Every whiff of tobacco has a bad effect upon the heart. The habit offers a grand opportunity for moral and physical downfall.

Don't take chances with alcoholic liquors in any form. Remember frequent visits to the cider barrel sharpens the appetite for something stronger. Alcohol is a veritable wolf in sheep's clothing, ever ready to devour good morals and all self respect.

Don't become a dime novel fiend. Believe me, they do far more harm than good; in fact, some of them are actually dangerous. When there is plenty of clean, wholesome, uplifting literature at reasonable prices why waste time with cheap blood-and-thunder trash?

Don't forget the proper title when speaking of older persons. It sounds very bad to hear you say "Old Jones" instead of "Mr. Jones." The boy who shows respect for older people wins admiration anywhere.

Don't tease and torment other children, especially those younger than yourself. It is the surest sign of a cowardly nature, and a boy with a spark of manliness will never do it. Never make fun of another boy's clothes.

Don't be a practical joker, unless you want to lose the respect of all your friends. Only a few mean tricks will brand you as a mean fellow. There are plenty of ways in which you can have a jolly good time without injuring the feeling of someone else.

Don't be careless of your personal appearance, as it counts for much either for or against you. Not that you must always wear expensive clothing, but the little details are important. Clean hands and face, combed hair and brushed clothes do not cost a cent.

Don't forget to help mother occasionally. She is your best friend and will be true to the end. When she is tired your wiping the dishes will be a great help. You will never regret making her life a little more pleasant.

Don't take anything that does not belong to you. "Oh, I never steal anything" you may say. Let us see. Helping yourself to apples and pears is a trifling matter, but it is stealing and may lead to greater thefts. The standard of honesty cannot be too exalted.

Don't by all means fail to attend church regularly as circumstances will permit. It will do you good and you are setting an excellent example for other boys. Make it a habit. The world's greatest men are churchmen and it has always been so. Nothing will help you along through life so much and nothing will afford you more genuine peace of mind. If you are a church member, really sincere and mean business, the world will always have an honorable place for you.

Future Of The Apple.

There were 151,323,000 apple trees in bearing in the United States in 1910, according to the census report, as compared with 201,794,000 trees in 1900. These figures afford some comfort to the optimistic orchardist who is extending his orchard acreage each year. The census figures, showing 66,000,000 young trees in 1910, not yet in bearing to offset the 50,000,000 decrease in bearing trees since 1900, are in no wise alarming, for a considerable percentage of these newly planted trees will never reach bearing age, and it is estimated that the older orchard trees are dying out at the rate of about ten per cent. a year. Evidence of the reliability of these figures is furnished in the report of fruit production which shows that the apple crop of 1896 aggregated 69,070,000 barrels, in 1900 the yield was 56,820,000 barrels, and in 1904 it was 45,360,000 barrels, while this season's crop is conservatively estimated around 40,000,000 barrels.

Fifteen or sixteen years ago, apples were selling at extremely low prices, as were other products of the farm. There is no apparent reason why, even with a much larger yield, prices in the future should reach the low level of those disastrous years. Apple prices will go lower, no doubt, with increased planting, but that the general average should fall to an unprofitable basis is a condition wholly unnecessary. By means of co-operative packing and marketing associations, with systematic advertising, the demand for apples can be developed and the markets extended at a rate which will take care of the expansion in orchard production should the present rate of planting be maintained for several years to come.

Doesn't your choir sing at the prison any more?" "No, several of the prisoners objected on the ground that it wasn't included in their sentences."—Boston Transcript.

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The Farmer's Share of Prosperity.

Is the farmer getting his fair share of our national prosperity? asks Literary Digest. Although the consumer, paying ever more and more for the necessaries of life which the farmer provides, would probably have no hesitation about answering this question in the affirmative, the latest Census Bureau bulletin tells us that there is another side to the story. Thus we learn that of the 6,361,502 farms in the United States, only 3,948,722 are operated by their owners, the remaining 2,354,676 being worked by tenant-farmers. The number of mortgaged farms has increased 17.7 per cent. in the ten-year period between 1900 and 1910, and the number of tenant-farmers has increased 16.3 per cent. These figures, as interpreted by the New York World, mean that "ten years of unexampled prosperity for the protected trusts have left marks of debt and dependency upon American farmers." It is upon the farmer, declares this Democratic paper, that "the blight of privilege, plutocracy, jingoism, and extravagance has fallen." To another Democratic paper, however, these same statistics tell a much less gloomy tale. "It is an utter mistake to suppose that farm-mortgages mean the poverty of the farmers," declares the Philadelphia Record, "nor does the increase in tenant-farming mean the degradation of the agricultural class, although it does involve a regrettable loss of independence." And it goes on to explain:

"Farm-mortgages are not negotiated to meet living expenses; they are placed as an incident of buying property. The cultivating class contains a steadily growing class of tenants, not because farming doesn't pay, but because it does pay; it pays so well that the value of farms is constantly rising. It takes much more money to buy a farm now than it did ten or twenty years ago, and for that reason more cultivators must hire, and of those who buy a greater proportion must borrow money."

"In twenty years the average mortgage per farm has increased from $1,224 to $1,715. But the average value per farm has increased from $3,444 to $6,289, so that the average farm is worth almost twice as much as it was twenty years ago, and the proportionate burden of the mortgage has decreased."

"The farmer's day is not past; farm conditions are changing, that is all," thinks the Indianapolis News (Ind.). The New York Globe (Prog.) discovers both a bright and a dark side to the story of our farms. Of the bright side it has this to say:

"The total number of farms is 6,361,502, with practically the same number of owners. Our most important and most basic industry is thus not monopolized. The disease of bigness and consolidation, if it be a disease, has not attacked the agricultural interest. The farms beckon to all those cherishing an ambition to be economically independent. It is still within the reach of any young man to be his own master on his own acres. In the industrial world there are a few big prizes, but the many necessarily draw blanks. In the rural regions few big prizes are hung up, but there are no blanks for the thrifty and intelligent.

The other side of the picture, in The Globe's opinion, is represented by the fact that more than a third of our farms are occupied by tenants:

"It is becoming more and more the habit of successful farmers throughout the West to move to town to educate their children and to enjoy closer social contact. They think they have earned the right to rest, and they have. But the tenant seldom makes as good use of the land as the owner. One of the main objects of the land-banks whose creation, President Taft recently recommended would be to lend money to tenants on easy terms and thus enable them to get title to the land they now rent. Something is needed along this line to abate the evil of tenantry, for the rise in land values is making it more and more difficult for an unassisted tenant to buy the land he tills."

—o—

The people of a certain Canadian town are devoting all eggs laid on Sunday to the rebuilding of the village church. They ought to rename it the Church of the Pilgrims—on account of its indebtedness to Plymouth Rock.

—o—

The Insect Tax.

After much computing, the experts of the Department of Agriculture at Washington have set the value of the agricultural products destroyed each year in the United States by insect pests at eight hundred million dollars, says The Youth's Companion. That vast sum may be called the insect tax paid by the farmers. It is much larger than the tax paid each year for the education of American children, and much larger than the amount at which the buildings and endowments of the six hundred colleges in this country are valued. It is twice as large as the amount lost in the San Francisco fire, and three or four times as large as the combined bonded and floating debts of all the states of the Union.

If the great usefulness of the insectivorous birds had been realized earlier, the farmer would have avoided paying some of this appalling tax, and would have been better off. Men who have given long study to the subject assert that bird life is one of the indispensable balancing forces of nature, and that the increasing activity of insect pests has been the natural result of the destruction of the birds—a process that during the past generation has gone on with little check.

For this reason, Congress is strongly urged to enact laws for the protection of all game and song-birds. It is argued that since these birds are nearly all migratory, they should come rather under the protection of the national government than under that of the different states, some of which have conspicuously failed to pass laws needed to save the birds from wholesale destruction.

One of the chief obstacles in the way of such national legislation has been the fear that by enacting it, Congress would infringe upon the rights of the states.

Although in Europe, bird life has long been protected by treaty and international decrees, in this country it has been wantonly sacrificed with the other natural sources. Now that one result of the waste has been shown in the stupendous total of hundreds of millions paid by the farmers in the form of an insect tax, there is hope that the birds will at last get the protection they deserve.

—o—

One way to remove weeds is to marry a widow.

Love is never so blind that it can't see an engagement ring.



This issue is devoted somewhat largely to the apple, therefore we call attention to the illustrations of apples given in these pages. These photographs largely represent apple growing in Wisconsin and are kindly loaned to us by the Wisconsin Horticultural Society. Wisconsin is not widely known as an apple growing state. Wisconsin has been considered too far north for the best success in apple growing, but these photographs which appear in this issue of Green's Fruit Grower would seem to establish the fact that Wisconsin is an apple growing state. No one has doubted the fact that the soil of Wisconsin is remarkably fertile, but it has been assumed that only hardy varieties of apples will succeed in many parts of Wisconsin. This is undoubtedly a fact, but nevertheless any person seeing these attractive photographs must be impressed with the thought that Wisconsin people need not go hungry for the lack of apples grown on their own farms.

Try This Stump Puller at Our Risk The Smith Stump Puller will take out every tree and stump by the roots, clearing from one to three acres a day, doing the work of twenty men. We want you to send for our 3 year guarantee against breakage and our free trial proposition Address W. Smith Grubber Co. 7 Smith Sts. LaCrescent, Minn.

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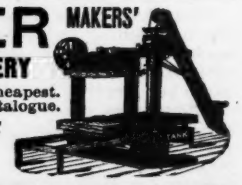
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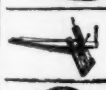
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The Apple Situation in The Central West.

We are living in central Illinois. We are out of what is called the "apple belt" of the state, but within two counties on one hand, and three on the other, of the apple growing sections, and under fair conditions ought to be able to have abundance of apples at a low price, says The National Stockman and Farmer. There are numerous large orchards within 75 or 80 miles of us on the south, and also within 125 miles on the west. Shelby county, of which our little city is the seat, produced nearly or quite enough apples to supply the county. The merchants have so far shipped in nothing but eastern-grown fruit. New York apples are of better quality than home-grown apples and of course would naturally command a higher price. They are not priced by the bushel or by the peck, however, but are sold three for a dime. Home-grown fruit is sold at 25 to 35 cents a peck at the present time, in fact has been selling around that price for several months. Most of these apples are windfalls at that. This may not look like a high price to some of our eastern city folks but, when you consider that good hand-picked apples can be bought at 20 to 25 cents a bushel within about a hundred miles of us, it begins to look different. And this is just the situation.

APPLE PRICES.

I spent a few days in Pike county a short time ago, and apples were selling there for 20 to 25 cents a bushel at the orchards and from 30 to 40 cents in town. I am now in Wayne county, and conditions are the same. One grower told me that he sold his crop for 50 cents per hundred pounds at the car. Allowing a reasonable sum for freight, commission, etc., these apples ought to sell, in a city less than one hundred miles distant, somewhere under a dollar a bushel, and leave a margin of profit to all. Of course, it may be argued that it would not be fair to the farmers of our own county, for the merchants to ship this fruit in. But there are two sides to this, as to all questions. Fully one-half the farmers in the county, and all the people of the towns and cities, are compelled to buy their apples. And the worst feature of it all is the fact that those who have fruit to sell are not getting a fair proportion of the price the consumer pays.

GROCERS PRICES FOR APPLES.

I was standing in front of one of our leading grocery stores a few days ago, watching a farmer unloading some very nice-looking fruit. When he had finished I overheard the merchant tell a clerk to pay him for them. He paid the man 60 cents a bushel. A few minutes later I stepped into the same store, and asked the price of those same apples and was told that they were $1.25 a bushel. This suggested the thought that 60 cents a bushel to the man who had bought the trees from the nursery, planted them in his orchard, cultivated them for ten or twelve years, pruned them year after year, sprayed them, picked the fruit, hauled it to town, and carried it into the store, looked pretty small besides the the 65 cents a bushel profit secured by the merchant, who did nothing except pay for the fruit, measure it out to the consumer, and deliver it to his home, all of which was done within a period of a few hours. It may be all right, but it will be quite difficult to convince the producer or the consumer that it is.

The question will no doubt be asked, "Why doesn't the farmer sell his apples direct to the consumers?" This is done in some places. But where it is done, the price asked is usually about as high as is asked by the merchant. In many instances, the farmer thinks it too much trouble or, it may be, beneath his dignity, to "peddle" apples. In these cases the blame rests upon the farmer. In most cases, perhaps, the towns and cities have enacted laws prohibiting the "vending" or "peddling" of anything on the streets. This is usually done by request of the merchants, who are looking after their own interests, and who want the usual profit on everything sold in their town or city. And, while I do not believe a farmer who grows his own stuff can be legally prevented from selling his products to the people who need them, yet the effect is the same as if he could be. He is told that a prosecution will follow any infraction of these ordinances, and, as he doesn't wish to be mixed up in a lawsuit he is simply "bluffed" out. And by reason thereof, he becomes a loser, and the consumer pays an exorbitant profit on his apples. This is not only true of the apple situation, but in a general way, it is true of all the products of the farm. And the conditions will be no better until producers and consumers are brought into closer touch with each other. The Parcels Post will help in some ways, but not in all. Other means must be used, and other methods devised.

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Tree Cultivation and Fertilizers.

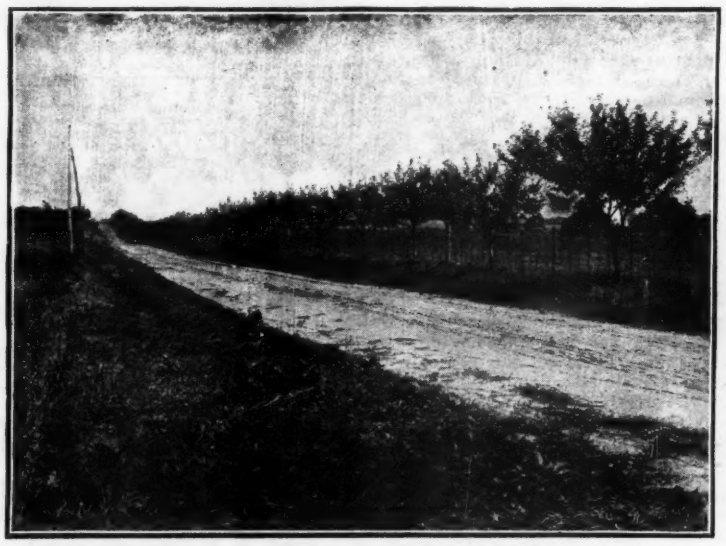
Do you realize that we are starving our orchards? What farmer among us would think of growing wheat in a field for twenty years in succession without manure? says American Cultivator. What would be said of one who attempted, not only that, but also at the same time tried to secure a catch crop from the same land? Yet hundreds of farmers are every year attempting just such a short-sighted policy. They try to grow apples and grain or hay on the same land.

It has been estimated by eminent chemists that the plant food carried away from an acre of bearing apple orchard in fruit sold, and leaves blown away would be worth at commercial rates $207.45 in twenty years, or over $10 worth a year. against this a fifteen bushel crop of wheat would remove in twenty years only $128.23 worth of plant food, or between $6 and $7 worth per year.

A bearing orchard makes annual demands upon the soil almost as heavy as a 25 bushel crop of wheat, not allowing anything for the yearly growth of wood. Remember, too, that an orchard makes no return of roots and stubble to keep up the physical condition of the soil; nothing but a few leaves and the seeds of some waste apples. Yet, when an orchard has borne a crop of fruit, and perhaps had a crop of hay or grain removed the same season, we wonder why it should need a rest for a year or more.

Bear in mind that a cropped orchard not only suffers a double demand on its fertility, but the sown crop is almost certain to deprive the trees of moisture, particularly in the early part of the season, when an extra supply of it is most needed.

A good orchard, well attended, is the most profitable branch of the average farm. It should be liberally fertilized and cultivated (if possible) in the early part of the season. It pays handsomely to do it. Do not starve the goose that lays the golden egg. From a careful record of sales made from the product of four acres of Fameuse planted in 1881 dated from 1894 to 1903, a period of nine years, I received an average net return of $800 per annum, after paying all expenses of picking, packing and commission of sales, except cost of barrels.



I send a photograph of 75 apple trees which I set out along the road by my farm. I was 70 years old when I set them out, am now 78, and this fall the trees bore a few apples. They are Greening, Baldwin, Jonathan, Grimes' Golden, Winesap, Yellow Transparent, Yellow Bellflower and Red Astrachan. G. W. Meyers, Sr., Ohio.

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to our customers. This guide shows cuts of all insect and fungus pests, with full description, remedies, etc. The book is written in plain, simple language and will prove a valuable guide to even the most experienced grower.

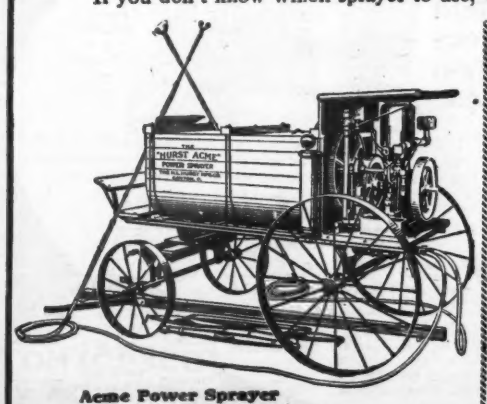
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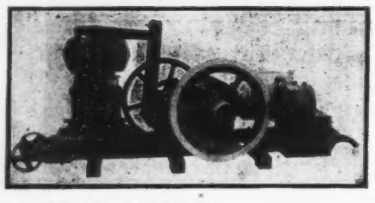


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The Old Church Bell.

Written for Green's Fruit Grower by Esther P. Smith.

'Twas evening, the sun sank in the golden west,
The wind was still and the birds at rest,
But that stillness was broken by a sound so clear,
Which caused me to listen for it seemed so near;
'Twas the old church bell,
The evening bell,
In minor notes, sweet evening bell.

As the sun looms up in the rosy east,
Awaking on a Sabbath of rest and peace;
We again hear those tones which cheer the heart,
How sad it would seem if we had to part.
With the ringing bell,
The swinging bell,
With the dear old church bell.

At the noon of day when the world's aglow,
And birdies a twittering as they flit to and fro;
There's a merry throng wending their joyous way,
As the bell peals out, it's the marriage day.
'Tis the wedding bell,
The high-noon bell,
For two young lives its greetings tell.

It was nearing the last hour of the year,
The old church bell was ringing loud and clear;
Echoing and re-echoing upon the midnight air,
Sending the old year out with its toil and care.
'Twas the old church bell,
The joyful bell,
Ringing the new year in, and to the old farewell.

Though the sun in its glory is shining complete,
There are shadows of sorrow on the faces we meet;
Of those that are wending so silent and slow,
To the call of the bell that is ringing so low.
'Tis the old church bell,
The solemn bell,
'Tis tolling a sad, sad funeral knell.

Though our lives may be fading, our eyes growing dim,
Our steps be more slow and more feeble in limb;
Then in childhood memories will fondly dwell,
Going back to the sounds of that dear old bell.
That Sabbath bell,
That twilight bell,
It's ringing now, sweet memory bell.

Practical Points About Planting Apples, by an Expert.

By U. P. Hedrick, Geneva Experiment Station in Tribune Farmer.

Don't Plant Dwarfs.—I am very doubtful as to the advisability of planting dwarf trees. I make this statement because it is somewhat difficult to obtain dwarf trees and because experiments show that apples on dwarf stocks do not seem to be as profitable as on standard stocks. This station has four dwarf apple orchards in different parts of New York, in which we are growing all of the standard varieties of apples. These orchards range from eight to sixteen years old. So far, with the exception of two or three varieties, dwarf trees have not proved profitable. Of all the kinds we are growing it may be said McIntosh, Wealthy and Lady seem to be the most profitable.

It is not necessary to interplant varieties of the apples recommended for cross-pollination. These set fairly well without cross-pollination, and the filler system will provide apple cross-fertilization until the trees are mature, when the tendency is for them to set too much fruit, rather than too little.

Head Trees Low.—By all means, plan to keep the heads of the trees low. Start the heads as near as possible at two feet from the ground; that is, the lowest branches should be about this distance from the ground. Some good fruit growers are heading even lower, but I doubt the advisability of getting much lower than two feet, and believe it rather better if the heads are a very little higher, rather than lower, than the height given.

Young Trees Need little Pruning.—Considerable experience and rather carefully conducted experiments now going on lead me to believe that fruit growers prune young trees too much. If trees come in good condition from the nursery I should not cut back all of the branches to stubs, as is common practice, but should instead cut out a number of whole branches, leaving four or five very nearly intact. The plan recommended is best for the reason that the plumpest buds and those which will develop first are usually toward the end of the branches, and quickly give large leaf surface in the spring. Trees so pruned will usually be able to withstand better a hot, dry summer. In case the branches are long and willowy there should be some heading in as well as cutting out.

At planting make an attempt in all pruning to secure the branches as nearly as possible where you want them, and save only those that are needed to make the frame-work of the trees, with the expectation of doing comparatively little pruning until the plants come in bearing. The less the trees are pruned for the first few years, the quicker they will come in bearing, and, to my mind, the better the trees. About all the pruning necessary in a young orchard for five or six years after planting will be to cut out surplus branches and such as cross or form poor crotches—the sooner cut out the better—and now and then to head back an exceptionally long branch.

Plan to cultivate.—By all means plant with the idea of cultivating the orchard first, last and always in the average New York plantation.

—o—

While New York drank 4,838,960 barrels of beer in 1893, Chicago only disposed of 2,716,741 barrels. What right has Chicago to claim equality with the metropolis?

A 150 Acre Farm Should Produce $15,000 A YEAR

D. Gold Miller, near Inwood, West Virginia, has an average farm in all ways—136 acres—BUT PLANTED IN APPLES. In 1912 he received over $15,000 for his fruit, and it is safe to say that two-thirds of this was profit.

The average farm of 150 acres brings in an annual total of only two or three thousand dollars, but this is because grain, hay and stock are the sole products. Plant this land in fruit—and with only slightly increased expense the income will jump to five times what it was before.

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Send us your name and address for 24 packages of **Bluine** to sell at 10 cents a package. When sold return our $2.40 and we will send you this beautiful violin and outfit just exactly as represented.

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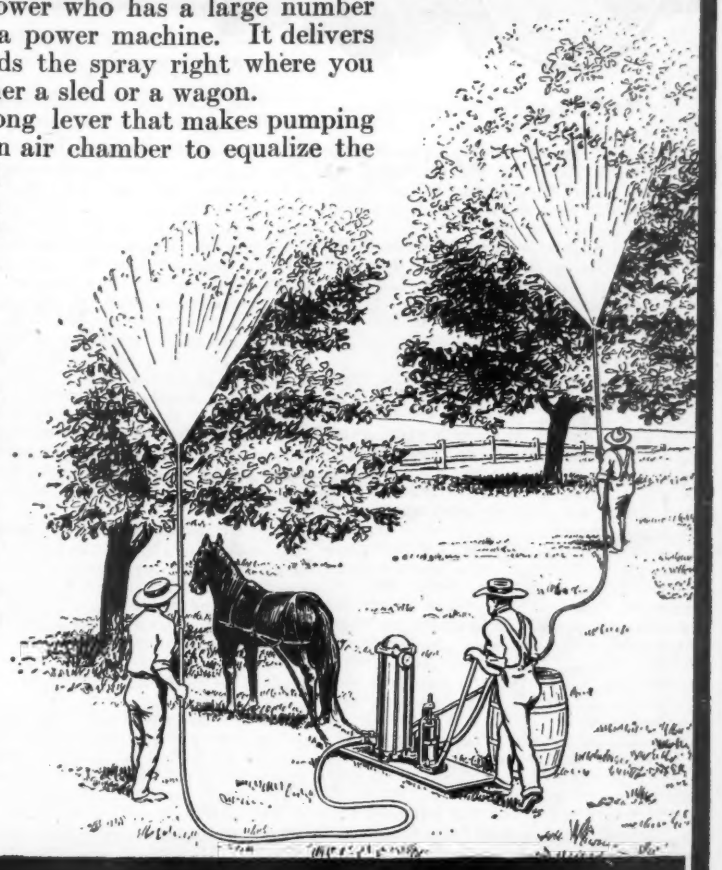


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The Deming "Samson" Spray Pump Does Rapid and Thorough Work

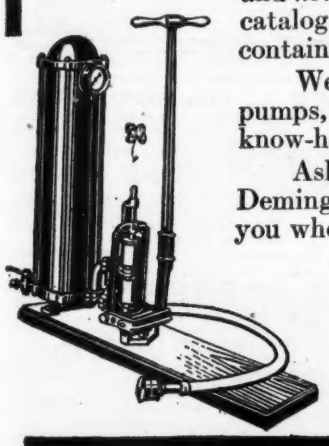
This pump is made for the fruit grower who has a large number of trees to spray, but does not require a power machine. It delivers two streams under strong pressure, sends the spray right where you want it, and works effectively from either a sled or a wagon.

The "Samson" Sprayer has a long lever that makes pumping easy. It operates continuously, with an air chamber to equalize the pressure. It's built to do more and harder work than you can give it. The working parts that touch the poison are of brass. There's nothing to corrode or rust.



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Letters From the People.

"Prudent questioning is the half of knowledge.—Proverb.

Pruning for Special Effects.

I would like to know where I could obtain detailed information regarding the method of pruning used in Washington and Oregon to produce the long drooping branches the apple trees there, seem to have. If you can tell me of any publication on this subject I will be very much obliged.—H. G. Reist, N. Y.

Reply: I know of no book such as you ask for. Every variety of apple tree has its peculiar method of growing, some drooping, others growing skyward.

Crawfish Soil.

To the Editor:—I am a fifteen year subscriber of your valuable paper and always find it interesting and instructive. I have a small tract of land and would ask an answer from you how I should handle same to make it productive, etc. The ground is a dark crawfish ground and tough. I have plowed it often for longer than a season but it will not grow anything well—do not know what I should treat it with to make it good. Please tell me.—Chas. Rentzel, Ark.

Reply: I cannot understand what you mean by tough crawfish ground. It is useless to bother with soil that cannot be made productive. The sooner you leave it the better, but first learn from your state experiment station at Fayetteville, Ark., what they can do to advise you. There are some soils so excessively clayey or sticky that they cannot be pulverized or made productive. Possibly your soil is of that class.

Editor of Green's Fruit Grower:—1. A month ago I saw in a farmer friend's orchard in this (Gage) county an apple tree that had been blown down and had been lying almost flat on the ground for several years and had borne fruit every year. The heart was partly rotted but the top was loaded with fine fruit. Some limbs grew straight up with perfect specimens of the Missouri pippin. No spraying had been done.

2. A friend of mine says that he has known of a number of bearing orchards killed by using the orchards as pastures. What is your opinion of this? It is news to me.

3. Jonathan apples and some yellow apples, which I think are Grimes' Golden or Maiden's Blush, are offered for sale here in a grocer's window at five cents each, and yet we had a good crop of apples in this state this year. Just think of the most common fruit selling at a nickel apiece. Peaches sold as low as twenty-five cents a bushel for home product.—Daniel Dell, Nebraska.

C. A. Green's Reply: I have never known a bearing orchard to be killed or seriously injured by being pastured by sheep, swine or cattle, and see no reason why they should be seriously injured by pasturing. It is possible that sheep, or swine or even horses might in rare instances gnaw the bark of the trees and thus do them injury.

Potato Rot Investigation.

Mr. Chas. A. Green:—Your letter of December 3rd is just to hand, and the seriousness of the potato rot in the various sections is something appalling. We have in this Department some specialists who are investigating the matter, and will help in all ways possible. I have just referred your letter to Professor Corbett, Horticulturist of this Department, who has a specialist studying the potato rot industry.

Trusting that he may be able to help, I am Yours very cordially, G. B. Brackett, U.S. Pomologist, Washington, D. C.

Western New York Farm for Sale.

Editor Green's Fruit Grower:—I see you have improved farms in New York for sale cheap. Where is there a cheap 40 or 80 acre farm set to apples for sale with fair improvements?—B. F. Blake, Ohio.

Reply: There is a farm about thirteen miles from Rochester, near Green's Fruit Farm, a splendid location for apple orchards or other fruits, a delightful farm in every respect. The buildings could not be reproduced for $8,000. This 100 acre farm can be bought for $110 per acre. Or it will be sold with a smaller amount of land, if desired. This is about as low as you can expect to buy land in this section of Western New York, where the finest apples are grown and other fruits. There is a small bearing orchard on the farm. The best apples I saw the past season were grown on this farm.

Woman at Poultry Keeping.

Editor of Green's Fruit Grower:—I am located among the poultry raisers and duck farms of this part of New York state. Most of my neighbors have their business in the city and fine country homes here. I not only raise poultry for eggs and market, but I sell poultry specialties such as incubators, brooders, etc,, and devote the lower part of my house to a show room where I invite the public to see the incubators at work before buying. Last year was my first year here and I now have a good trade. Formerly I was in the poultry business at F., where I had long gardens set out to small fruits and used them for my chick runs with great success. I planted my raspberries and other plants four feet apart and between them I planted potatoes. I allowed my ducks until they were six weeks old to run among these plants and the chickens to run there until eight weeks old. I raised good crops and took some orders for raspberries, blackberries, gooseberries and currants. I tried to educate the people in this line and I have had considerable success.

I have lived all my life on a farm but for fifteen years was business manager of a manufacturing company in the city, going into the city every morning and returning to my home in the country at night. Now I am in business for myself, and as I have from five to fifty callers a day, I expect to build up a large trade.—Miss G. A. Hunter, N. Y.

Even your best friends haven't time to do much worrying on your account.

Her Aim.

Dr. Lyman Abbott, who is an opponent of votes for women, was praising on a Bermuda steamer a young Vassar girl.

"She delighted me," he said, "in a chat I had with her yesterday at tea. We talked about Ibsen and Shaw, we talked about the new morality and the militant suffragette, and finally I said quizzically:

" 'And what, may I ask, is the height of your ambition?'

" 'Six foot two,' she answered promptly, 'and he's the best first base Yalevard's had for seventeen years.' "

Gasoline More Explosive Than Gun-Powder.

As there are many people using gasoline for cleaning gloves and clothing, I feel like cautioning the readers of Green's Fruit Grower about the danger of the fumes of gasoline exploding. Notice that it is the fumes of gasoline exploding in a gasoline car engine which propels the car with speed force.

Recently I have heard of a girl who was using gasoline in a small bathroom, cleaning gloves or clothing. She suddenly left the room and closed the door. When she came back she entered the room with a lighted match, when there was an explosion that threw her with great force into another room and set fire to the house. After using gasoline the windows should be raised and the door closed and no exposed light should enter the room for several hours.

Mrs. Casey (sitting up in bed)—"Moike, did yez put out the cat?"

Mr. Casey—"Oi did."

Mrs. Casey—"Oi don't belave it!"

Mr. Casey—"Well, if yez think Oi'm a liar, get up and put 'er out yerself."

Take the Other Hand.

A lady who was visiting a rope works saw at one end of the building a little boy turning a very large wheel. She thought it was too hazardous work for such a child, and as she came near she spoke to him.

"Who sent you to this place?" she asked.

"Nobody; I came myself."

"Are you paid for your labor?"

"Yes; I get nine pence a day."

"Does your father know you are here?"

"I have no father."

"What do you do with your money?"

"I give it to my mother."

"Do you like this work?"

"Well enough; but if I did not I should do it, for I want to get money for my mother."

"How old are you?"

"Almost nine."

"Are you never tired of running the great wheel?"

"Yes, sometimes."

"And what do you do then?"

"Why, lady, then I take the other hand."

She went home strengthened in her devotion to duty, and said: "The next time my task seems hard to me I will not complain, but 'take the other hand.'"—The Classmate.



The Woman Who Proposed.

By C. A. Green.

While it is assumed that most marriages are brought about by the solicitude of the man and by his proposal of marriage, it is conceded that the way is often paved by the woman in the case.

There is no reason why man should do all the proposing, and in fact he does not do more than his share. The girl in most cases does her part, but in a way so delicate and unobtrusive that the lover is oblivious of her methods.

But there are cases on record where the woman has actually popped the question. The case I have in mind is that of Victoria, Queen of England.

As I understand, there was no one living who was acceptable to Victoria who could propose for her hand. It would have been presumptious for anyone less than a king to propose marriage to such an august personage.

Victoria, having arrived at a marriageable age, young men who were deemed suitable were invited by some one not definitely known to meet the Queen informally in a social way. Among these interesting young men was one known as Prince Albert, tall, blue-eyed, affable, interesting, a musician and a good dancer. Queen Victoria fell in love with this young man and actually asked him to marry her. The marriage proved to be a happy one.

I assume that Prince Albert was not greatly astonished or alarmed when from the lips of the young Queen came the words which made him the happiest man in Europe. Undoubtedly the Queen had on previous occasions led him to believe that he occupied a high place in her affections.

—o—

Hot alum water is the best insect destroyer known. Put alum into hot water and let it boil till it is all dissolved, then apply the solution hot to all cracks, closets bedsteads and all places where any insects are found. Ants, bedbugs, cockroaches and creeping things are killed by it, and there is no danger of poisoning the family or injuring the property.

Model Breakfast

—has charming flavour and wholesome nourishment—

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This delightful food, made of Indian Corn, is really fascinating.

Corn, says Dr. Hutchison, a noted English authority, is one of the ideal foods.

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Battle Creek, Mich.

The Doctrine of Discontent.

Written for Green's Fruit Grower by Mrs. Hackett, Wis.

There seems to be a great many people in this world, who are discontented with their lot in life, and not only this, but in many cases they are discontented with other peoples affairs as well as their own.

For a long time in the woman world, this was confined to the temperance cause and the suffrage question, but just now the germ of discontent is striking at the spinal cord of the backbone of our country, at the wives and mothers who are living on the farm.

They are making pertinent quiries of our home life and habits, they are telling us to leave the farm, or have the house moved nearer to a center location, they want us to establish kindergartens for our little ones, and what will they want next?

Now we wonder if some of those people realize that, as they go out to the farms to make inquiries and gather in statistics, they will meet just as good society as they leave behind them, only under a little different conditions, that with the same positions and means the woman of the farm is often better read, better educated and a better business woman than her sister in the city.

We are not saying this of all farmers wives, for each woman has her own means, chances and education, of which she must make the most and which she generally does. But, on the other side, the people of the cities are not all found in the fine houses on Main Street, they are not all well educated, their children are not all social, physical or mental successes, even with their superior advent ages.

There was conducted in a noted newspaper recently, a investigation in which a thousand letters were received from discontented women on the farm, and many of them were commented upon and some published.

Out of the whole, we notice one fact which does not seem to be noticed by the paper, and that, out of the one thousand nearly seven hundred were from people who had always lived on the farm.

Now, we all know, that in order to understand a question, it is well to look at both sides of it, their complaint was that they worked too hard, they had few social advantages, and they were tired of the farm life generally. On the other side, do they know how the woman of the cities and villages work? Do they realize that with the same means, with or without children, there is work in either place for all, and that in the city there is a constant cry for "more" and that "more" means the dollar every time? I know that many women work harder than they should, but those women are not all found on the farm.

As to social advantages, there is a question in my mind as to what is meant by them. There is an old saying "that water seeks its own level" and people instinctively do the same, what one enjoys another does not, and the different levels of the city are hard to find with inexperience as a teacher.

We believe that the farmer's family could have much better social advantages if they would, by keeping in touch with the life of the larger towns around them, and by taking some of these that they would especially enjoy as a relaxation from the duties of the farm, a half-dozen trips through the year, or maybe less, would make life much more pleasant.

But, you say "that costs money" "carfare, hotel bills and theatre tickets, it means money," sure, everything means money nowadays, but the fresh air and sunshine of the farm, and what are you working for, if not to get the most out of life that you can, and is not personal pleasure and enjoyment counted as gain on the investment?

It takes money from the city too, and it is no easier money that it has been earned at the office through long days of business worries.

If every farm woman who has spent her whole life in the country realized the little economies, the keeping up of appearances, the turning and twisting of ways in which women of the cities help out the living of a limited income, the germ of discontent would vanish as if it had met a dose of anti-toxin.

Life is not all sunshine anywhere, and the difficulties of any position are not realized until we face them for ourselves and overcome them.

Out in the beautiful country scenes, in the quiet of the country life, count up your blessings, say them out, write them down, and thank the Father of All for them.

Sing a song as you work, gather your little ones closer and keep them there, that is the time when mother is crowned queen, the kindergarten may be a fine thing for the city little children, but out here in the country the first few years belong to mother, and the constant school association with other peoples children is one of the things which she is guarding against.

It is your home and your family, and your ideals that make much of the atmosphere around you, remembering this, seek an interest here for yourself, both as to work and recreation, and when you have solved the problem for fourself, seek some for the rest of the family, take up some fad or hobby, encourage others to do the same and to talk about them, common studies and common interest prove a chain which strengthens the home ties until the doctrine of discontent will not be tolerated and its germs will not thrive.

—o—

Canned Pumpkin.

Pick out the best pumpkins and take one day to cook enough to last all winter or longer. To one gallon of stewed pumpkin add one pint of sugar and boil down and seal in glass cans. When pie is wanted it can be had in a short time, by adding spices.

—o—

Grape Jelly.

Wash the grapes, remove stems, heat to boiling point, mash and simmer until they are very soft. Strain through a jelly-bag. Measure the juice, boil several minutes, and add an equal quantity of sugar. When a portion tried on a cold plate is of the desired consistency, pour into hot glasses. When it has set, cover with paraffin.

—o—

Quince Marmalade.

Pare, quarter and core firm, ripe quinces and cut into small pieces. Weigh them and allow an equal quantity of sugar. Put the fruit into a porcelain lined kettle with barely enough water to cover it. Cook slowly until the fruit is tender and translucent. Skim frequently. Take out the fruit with a perforated skimmer and spread upon dishes. Now add the sugar to the water in which the fruit was boiled. Bring to a fast boil and remove the scum. Drop in the quinces. Boil steadily fifteen minutes after the bubble has fairly begun; remove from the fire and put into small jars that have been rolled in hot water to prevent breaking.

—o—

Green Tomato Relish.

(Cooked; Sour)—Chop fine one peck green tomatoes; add a cup of salt and let stand over night. In the morning press out the juice and throw it away; add a little vinegar in sufficient water to cover well the tomatoes, and let boil twenty minutes. Drain again, then add two teacups of seeded, chopped raisins, two tablespoons of cinnamon, one each of cloves, allspice, ginger, and mustard, and if liked, one of celery seed, with one-half cup of horse-radish, two pounds of brown sugar and two quarts of vinegar. Six chopped onions may be added and more vinegar and the ginger, mustard and allspice may be omitted. It is a simpler form and better for a "relish" to omit these spices and use less vinegar.

—o—

What Cheap But Nourishing Food May be Devised For A Very Poor Man.

The poet says:

"Man needs but little here below,
Nor needs that little long."

This is true of that which we eat. We do not need much. Most of us eat twice as much as is necessary for our health and well-being. There are many men, bachelors who room by themselves and do their own cooking, if cooking it may be called. I can see how I could live very comfortably and yet only have one room, preparing my own food. All I would need for breakfast would be a good sized dish of carefully cooked oatmeal with cream. No tea or coffee. If any drink were necessary a glass of milk would supply that need. For dinner I would have a baked apple, or a raw apple of good quality, and a large dish of rice pudding and cream. For supper I would have a baked pear or apple and bread and milk with a portion of cream added. Here is simply a suggestion for one day's menu for a poor working man. If something more hearty is desired for the noon meal I would suggest hot or cold sausage or canned corn beef, which should never be left in the can after the can is opened,—or prepared soup which comes in cans and could be used at the noon meal.





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DIRECTIONS—Set gauge on the floor so that the skirt will fall over the long wire, making it come under or inside of the skirt. Fold the goods under, so that the long wire will come inside the fold, as shown in illustration No. 1 and pin the hem in place. Slide the gauge along and repeat. The Ezy-Hem can easily be used as a chalk marker also. Place the gauge with the long wire finger outside and against the goods, and simply draw chalk along the wire lengthwise, using the wire as guide or rule.

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Patterns for Women Who Sew.

09-11-39—Fancy Apron Design—Design for a fancy work or a chafing dish apron for French or shadow embroidery. This may be worked on linen lawn, cotton lawn, batiste or crossbarred muslin. Price 10 cents.

6043—Ladies' Dress, Having Three-Gored Skirt—Five sizes, 34 to 42 inches bust measure. Size 36 measures 2 yards around lower edge and requires 4 yards 44-inch goods; ¼ yard 27-inch contrasting goods. Price 10 cents.

6047—Children's Dress—Sizes 3, 5 and 7 years. Age 5 needs 2¾ yards 36-inch goods; ¾ yard 23-inch all-over. Price 10 cents.

6039—Boys' Blouse—Sizes 4, 6, 8, 10 and 12 years. Age 8 needs 2¾ yards 36-inch goods. Price 10 cents.

6050—Ladies' Overblouse, Closed on Left Side—Five sizes, 34 to 42 inches bust measure. Size 36 requires 1¾ yards of 36-inch goods; ¼ yard 27-inch satin for a girdle. Price 10 cents.

6049—Girls' Dress—Sizes 6, 8, 10 and 12 years. Age 8 needs 1¾ yards 36-inch plaid, ¾ yard 36-inch plain goods. Price 10 cents.

6045—Infants' Wrapper and Sack—Cut in one size and requires for wrapper, 2 yards of 36-inch goods; for sack 1 yard of 36-inch goods. Price 10 cents.

6044—Girls' Dress—Sizes 6, 8, 10 and 12 years. Age 8 requires 3¼ yards 36-inch goods. Price 10 cents.

5725—Ladies' 32-inch Length Coat—Cut in 6 sizes, 32 to 42 inches bust measure. Size 36 requires 3¼ yards of 44 or 2¾ yards of 54-inch material. Price 10 cents.

11-11-54—Dainty Apron—This apron design may be quickly worked, as there are only a few flowers and leaves in solid embroidery, while the fronds are in a fine featherstitch. Price 10 cents.

6035—Ladies' Apron with Bib—Cut in one size and requires 1 yard of 36-inch goods and 2½ yards 11-inch wide edging. Price 10 cents.

6027—Ladies' Dress with Panier Skirt and Closed at Front—Five sizes, 34 to 42 inches bust measure. Size 36 measures 2½ yards around lower edge and requires 7½ yards 36-inch goods; ¾ yard 22-inch goods for chemisette. Price 10 cents.

6028—Girls' Dress—Sizes 6, 8, 10 and 12 years. Age 8 needs 3¼ yards 36 inch goods. Price 10 cents.

6026—Misses' and Small Womens' Waist—Sizes 14, 16 and 18 years. Age 16 requires 2¼ yards 36-in h goods; ¼ yard of edging. Price 10 cents.

8230T—Pin Cushion—This design should be used upon sheer material and worked in solid and eyelet embroidery. Price 10 cents.

Order patterns by number and give size in inches. Address Green's Fruit Grower Co., Rochester, N. Y.

Hints to Housekeepers.

To keep salt from caking in the shaker, place with it either a little cornstarch or a few grains of rice.

To remove paint from dresses.—Paint marks can be removed from dresses or coats by rubbing them with a piece of flannel dipped in turpentine. The odor soon vanishes if the goods are hung in the air to dry. Grease spots can be removed in a similar way by rubbing with a cloth or brush dipped in ammonia. Dry in the open air in a shady place.

How to Keep Eggs.—Take 2 quarts of lime; one quart of salt; 3 ounces of cream of tartar; dissolve in 8 gallons of boiling water. Drop eggs in this pickle, fresh as gathered and keep in dark, cool place.

To prevent dishes from cracking.—Before using plates, pie dishes, or any crockery for cooking purposes, it is a very good plan to put them in a pan of cold water. Place over the fire, and let the water come to a boil. By so doing you will find the heat of the oven will not crack the dishes so easily.

The Shelves.—If these are used much and quickly soil, they never look nice and clean if paper covered. It is better and cleaner to give them either a coat of white paint or white enamel, which can be quickly washed over, saving time and labor.

To freshen and purify old butter, let it get warm enough to work good, then let stand in stro ig soda water 30 or 40 minutes. Rinse through two or three waters and work all the water out. The butter will be almost as pure and sweet as fresh butter.

To Remove Cake from a Pan.—Set the pan, while very hot, immediately on taking it from the oven, on a damp cloth, and allow it to stand for a few minutes. It will then leave the pan without sticking to its sides.

Never wash bread boards in a sink. Scrub with grain of wood, using a small brush.

Hints on Dusting.

In dust there lurks the deadly bacillus, and the woman who wraps her head in a handkerchief or cap, arms herself with a feather duster and proceeds to whisk it airily over ornaments and pictures is not only doing an unreasonable thing, but is actually doing harm. Here is a recipe for hygienic dusting. When you go to dust a room have three dusters. One must be damp, a chamois leather is preferable. Pass the damp duster over the furniture, when the dust will cling to it and not float in the air. Make a beautiful polish with two dry dusters. The damp duster can be rinsed out of water and wrung lightly as often as you please. One of the secrets of sweeping a carpet is to hold the broom almost perpendicular and take short strokes. Do not lift the broom more than three inches from the floor. If the carpet is very dusty, tear paper into small bits and soak in water for a few minutes, then press out the paper and sprinkle it over the carpet. The damp paper will absorb the dust. It improves the carpet to wipe it after sweeping with a cloth which has been wrung out of ammonia water—one tablespoonful of ammonia to a quart of water.

That a carpet sweeper will pay for itself many times over is easy to understand when one considers that the process is dustless and that a carpet treated in this way is more efficiently cleaned, while, at the same time, less stress is brought to bear on the fabric, and therefore the life of the carpet is greatly lengthened. When threads, etc., become a tangled mass in the bristles of the roller brush and seem impossible to remove, use a wire hair brush.

Lost Hand Saves Life.

Captain Weaver lays his escape to the misfortune of having lost a hand. With a steel-hook as a substitute for that member he drew himself up on the floating ice. He clung for hours on the iceberg that had destroyed the vessel. The next day he was picked up by Indians and taken to their camp. He suffered a partial stroke of paralysis as a result of exposure and for eight months was cared for by the natives. When he regained his health he went into the mountains prospecting, and eighteen months later he made a rich gold strike. He has now found his way back to civilization, to end his days at his old home in Eastern Washington. Such is the tale of the sea that the ancient mariner tells. All of which goes to prove once more the truth of the old, and tattered saying about truth being stranger than fiction.

Firelight.

Shut in from all the world without,
We sat the clean-winged hearth about
Content to let the north-wind roar
In baffled rage at pane and door,
While the red logs before us beat
The frost-line back with tropic heat;
And ever, when a louder blast
Shook beam and rafter as it passed,
The merrier up its roaring draught
The great throat of the chimney laughed;
The house-dog on his paws outspread
Laid to the fire his drowsy head,
The cat's dark silhouette on the wall
A couchant tiger's seemed to fall;
And, close at hand, the baskey stood
With nuts from brown October's wood.
—John Greenleaf Whittier.

Prevention of Colds.

The following rules for the prevention of colds were prepared by the Committee on the Prevention of Disease of the Boston Chamber of Commerce:—Colds are contagious. They are caused by germs. You catch cold just as you catch diphtheria. The germs of cold are spread from the nose and mouth of one person to another. Draughts, wet feet, chilling of the body, and sudden changes of temperature, will not in themselves cause a cold (stiff neck and other muscular pains are not here included.) These conditions may weaken the body, help the germs, favor the development of colds and make them worse. It is worth noting that Arctic explorers never suffer from colds until they become infected from their fellowmen on their return to civilization. Do not get close to others who have colds. Do not use handkerchiefs, towels, and cups that have been used by people who have colds. Even though you do get your cold from your neighbor, don't pass it on. Do not sneeze or cough except into your handkerchief. Do not spit on the floor; to do so may spread colds, tuberculosis, and other diseases. Do not neglect a cold. It may lead to serious complications. During the first few days, if you have fever, stay in bed. This will help you, and protect others from getting your cold. Take a laxative and use simple household remedies. If these do not help you, call a doctor. You will be able to resist the germs causing colds if you keep your body in good condition. Breathe pure air, avoid dust, take regular exercise; get plenty of sleep and rest; eat wholesome food, and do not sit for long hours in a stuffy, close room. Colds come from the bacteria in your mouth, teeth, nose and throat; therefore keep these parts clean.

A Natural Fruit Section.

One result of the fruit shown in Bangor, Me., last week, was to call considerable attention to the fruit growing section called the Newburgh Basin. About half the total of apples at the show were from the orchards of this section which it claims, produces the finest apples in the State. There were many varieties shown in boxes and in plates and they occupied a conspicuous place by themselves. Many of the trees in that section are well beyond half a century in age, while at this time numerous young orchards are being planted. A number of pictures of them at the exhibit indicated remarkable growth, some two-year-old trees bearing apples. It seems to be one of the natural fruit growing sections of New England, where a combination of soil and situation has marked out the most profitable specialty for the farmers.

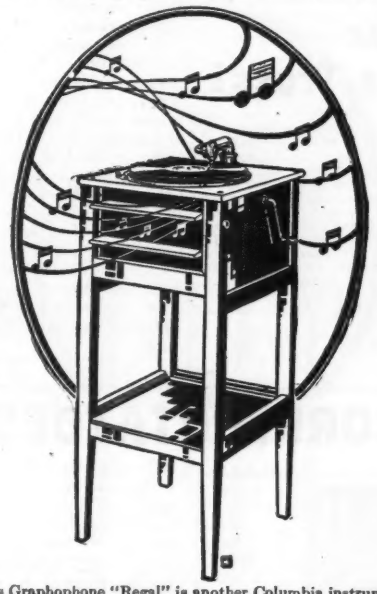

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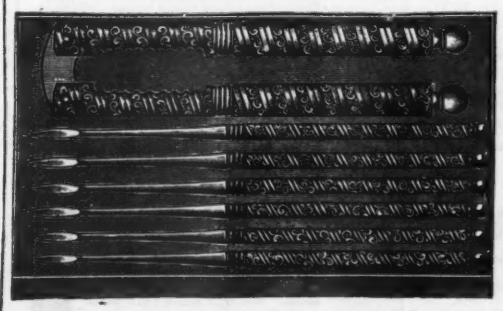
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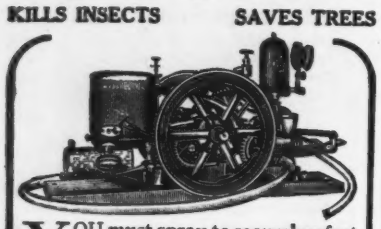
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YOU must spray to secure perfect fruit. Use a Fairbanks-Morse high pressure sprayer and do the work quickly and thoroughly. The above 1 H. P. Gasoline Engine Outfit will supply three ¼-inch Vermoral spray nozzles at 200 lbs. pressure which is the pressure required for effective spraying for scale diseases. The "Deluge" pump gives steady pressure. Entire outfit compact, strong and easily moved about the orchard. Will give splendid service for years.

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Contentment.

I crave no boundless hoard
Of things I can't afford,
No gold or gear,
No jewels fine,
No lands or kine,
No treasure heaps of anything.
Let but a room or two be mine,
Where I may breakfast, lunch or dine
Quite regularly,
And feel care-free
When I go home at night
To meet the smiling face of her;
To hear the kettle sing, the kitten purr;
To know that in the ice-chest, bolted tight,
A sirloin steak awaits my appetite.
—Post Express.

Sing a song of farmers,
Up at early morn,
With four-and-twenty chores to do
Before the breakfast horn,
When the breakfast's over,
There's little to be done,
Except to plow the fodder
And let the harrows run,
And mow the sheep and prune the beets
And curry up the swine,
And shear the hens and dig the hay
And shoe the gentle kine,
And saw the wheat and rake the rye
And wash and dress the land,
And things like that which city folks
Can never understand.
—"Life."

JOTTINGS FOR BUSY FARMERS

Protect the Young Trees.

It is time to think about protecting the young trees from rabbits. In the editor's boyhood days we attempted to do this by applying various preparations to the tree trunk, but we do not recall any that were effective. Last winter we saw a young orchard in which tarred building paper, costing 60 to 75 cents per 150 feet, had been tied around the trees, affording absolute protection. Cut in strips, wrap about the tree, and tie with tarred twine. The tar is a repellant not only to rabbits, but to mice and insects, and the trunks of trees protected in this way will not be injured. This may be left on during the season if so desired. The paper may remain around the trunk for two or three years without injury.—Kansas Farmer.

Plant Trees.

We have been talking about trees for a long while. We all know that they are not only an adornment to the farm premises, but they have also practical value not only for their wood, but for their shelter from the winds, and shade from the burning sun, says Farm Press.

Now is the time to plant them. If they be fruit trees, each locality has its favored varieties, and you should know them and plant only such as are adaptable. If it is wind-breaks and shade, you should know that the government experiments have proved that White Pine, Norway Spruce, Austrian and Scotch Pines and American Arborvita, have no superiors. These kinds grow rapidly and are not lacking in vigor or adaptability to thin soils, exposed situations and other adverse conditions. But do not plant evergreens exclusively about the home. Decidious trees occupy a place in any scheme for farm improvement, which the evergreens alone do not and cannot fill. Hard or Soft Maples, Elder, Elm, where they are suitable, should not be overlooked.

If you want fence posts for the future, Locusts or Eucalyptus are the proper caper.

Where the Black Walnut will grow, don't neglect to get a pack of nuts this fall, if you have to send far away for them; stick them in the ground, let the frost of winter burst their shells, and give your children a legacy for which they will thank you long before they are old men and women.

Where the Apples Are Grown.

So much has been published regarding exports of apples from the United States that one might be pardoned for thinking that this country is the leader in supplying foreign countries, says Post Express. When the export of apples is considered, one naturally thinks of Great Britain as the largest foreign consumer. It is of interest and information to note that last year, of the apples imported by the United Kingdom, Canada furnished 1,457,837 hundred weight, Australia 459,530, the Channel Islands 13,827 and other British territory 627, a total of 1,931,821 hundred weight from British possessions, as against 1,155,270 from the United States and 245,527 from other foreign territory; 59 per cent. in favor of British territory. Canada's receipts for apples sent to the mother country in the shipping season of 1911-12 amounted to $4,678,245; the United States received in the same period for apples sent to Great Britain $788,861.

Horse Talk.

Do not neglect to level the colt's feet when they are brought in from pasture.

The feet may be worn uneven, especially if the colts have been running in a stony pasture.

Nippers and a rasp should be used.

If this task is neglected, the colts are liable to develop blemishes or become crippled.

Awkward movers are often made by allowing the feet to grow crooked.

If possible, plan for dry box stalls with dirt floors in which to winter the colts.

If this is impossible, keep the stalls well bedded and clean to prevent accidents from slipping.

Put the paddocks, fences, etc., in order, so that the colts and young horses can spend the most of every pleasant day in the open air.

Do not let the colts run down in condition on frost-bitten grass.

They may fill up, but the nourishment isn't there.

A loss in the condition of a growing colt is a most serious one.

It always has a bad effect on the future value and usefulness of the horse.

Be careful about the man who handles and cares for the colts.

It is largely faith in the trainer or caretaker that brings the best results with horses.

This they must have from their colthood up.—Tim, in Farm Journal.

The happiness of the winter days may be increased by having an abundance of grapes, apples and pears. When people have learned to eat more fruit the length of life will be greatly increased. Think of the contrast between the healthy acids of fruits and the fats of animals which are so largely used as human food. The fact that fruits are eminently wholesome is shown by the recommendation that apple sauce be served with pork or with goose and that cranberry be served with turkey. This means that wholesome fruit acid is needed to counteract fatty foods. But further than this, fruits can be relied upon entirely for an occasional meal, thus relieving the weary housewife. Many times I make a supper out of apples or grapes.

What a pleasant feeling it is to be conscious of the fact that in your cool cellar you have a big bin or many boxes or barrels of delicious apples, or that the supply is so abundant that every member of the family can be assured of having all they desire to eat throughout the winter months. One of the notable characteristics of the apple, and the one that makes the apple king of all fruits, is that it is a long keeper. I can think of no fruit that keeps so long as the apple. The apple keeps longer than the pear and longer than the grape. Under proper conditions we may have apples every day of the year from the earliest harvest apple to the long keeper, providing we have suitable storage.

What is War?—I saw in one hospital near the front—I wish I could forget the sight—a young Bulgarian officer whose body, head, arms and legs were torn and gouged with thirteen separate wounds, shrapnel and bullet, and he was dying of —exposure. He had lain thus wounded on the battlefield for three nights and two days, yet so strong was his physique that but for the exposure and the resulting gangrene and pneumonia, he surely would have recovered. And his mother sat at the foot of the bed, motionless and dry-eyed, dumb with grief, watching the nurses tenderly dressing her son's awful wounds. They told me that she was a widow, and that she had two other sons at the front.

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It means real money to you to buy Fruit Trees with the confidence that you are getting varieties true to name, sturdy stock of perfect grades, all free from disease. Think it over.

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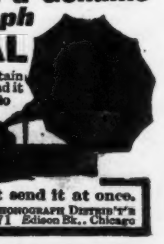
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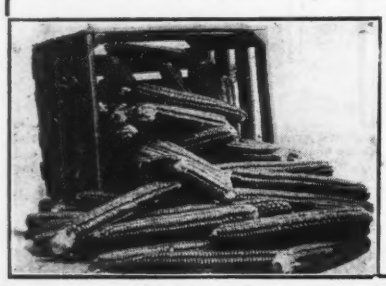


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THE TROUBLES OF A CITY FARMER.

He Intended to Plant 900 Acres to Fruit in New Jersey, but Planted Only 100 Acres.

It was just three years ago last August that I bought four farms and adjoining tracts of land, in all 900 acres, at an average price of $40 per acre, near Hopewell, N. J., fifty miles from New York City and 45 from Philadelphia. The land was at a good elevation, mountain grit soil and perfectly adapted to fruit growing. The purpose was to plant 100 acres or more in fruit the first year, and about fifty acres per year thereafter until all the available ground was utilized; it being calculated that the nearness of big markets would give us a substantial advantage over the great syndicate orchards projected in more remote locations. Also it was purposed to meet the running expenses as nearly as possible by hay and grain crops, dairy products, etc., until the trees began to bear. Most of my own time would be required at other work in the city, but I planned to spend Saturdays and Sundays of each week on the farms, organizing and supervising, and directing capable deputies as to operations for the ensuing week.

Right here arose the first great stumbling block—to get competent managers or deputies. However, Farm No. 1 of 225 acres was selected as a base, and managed by myself with the help of a working foreman. In the early spring of 1910, Farms Nos. 2, 3 and 4 were each put under the sole management of a supposedly reliable farmer, and 10,000 fine young trees planted thereon under my general supervision. But it did not take long to discern that two of these three "farmers" were shiftless incompetents, whose one thought and chief endeavor was "graft." There were no crops to speak of, and never likely to be any, under that kind of management. The third farmer meant well, but he was a drinking man and had other disadvantages. Thus with four separate farms, in a neighborhood clannish and more or less hostile to all city folk, single-handed, I was up against an impossible situation altogether beyond my capabilities. There was only one practicable way out—to sell farms Nos. 2, 3 and 4; this I did and am clear of them, fortunately without a loss, but only because they had been bought at a bargain price.

To return to Farm No. 1, which throughout I have made shift to manage myself, with the help of reasonably efficient labor. In April and May, 1910, we planted on this farm 2,000 apple, 2,000 peach, 2,000 dwarf pear and 1,000 plum. Since then we have planted an additional 2,000 apple, 2,000 peach, 1,000 pear, 300 cherry and 200 quince. Besides several thousand currant and berry bushes. The trees are all planted in a good clay loam, and I cannot see much difference between those set in dynamited holes and those in spade dug holes. The earth in dynamited holes is inclined to settle, making a kind of shallow basin around the tree. Apples planted in plowed-up sod, harrowed fine, have started slower than those set after a corn crop, but peaches have done about the same in either. Apples and dwarf pears planted in a field of oat stubble (apples in the fall,) have not done well. A few trees of each fruit have been planted as an experiment in dynamited holes on cleared woodland which is too rough to plow, but have not done well. Kieffer pears did the best, peaches the worst.

Two-year plum trees are better than one-year. Out of 900 two-year plums from Green's Nursery, we lost less than 30. Out of 100 one-year plums we lost about half. Peach trees must of course be one-year old when planted. We have tried both 1-year and 2-year apples and are inclined to give the preference to 1-year trees, provided only the right kind of stock can be had fresh dug, but 2-year are safer. In the fall of 1910 we obtained 200 York and 100 Rome Beauty from Green's Nursery, 2-year trees, and 500 1-year trees from a widely advertised big western nursery. The trees were carefully trenched over winter, got exactly the same treatment and were planted in the same orchard the following spring. Out of the 300 2-year olds, 298 are living and looking fine today, whereas of the western 1-year olds we lost fully half. On the other hand, from 600 fresh dug branched 1-year trees from a nearby nursery, we lost only 4 out of 300 Stayman, 3 out of 100 York, 2 out of 100 Grimes' and the 100 McIntosh all lived. The Stayman and Macs have almost caught up with 2-year trees planted at the same time.

And here should be mentioned one of the big discouragements that any beginner is liable to meet with in the kind of nursery stock he plants. Of all the apple trees planted in 1910 from one far western nursery nearly 15 per cent. died. I assumed that apples were hard livers, but have since discovered that the trouble was with the stock—they were all 2-year olds, too. Of 600 peach from a southern nursery, fine looking trees 7 to 8 foot, about half died. Out of 1,700 five foot each from a local nursery, we lost just 3. Out of 2,000 dwarf pears from Green's, splendid trees, we lost 11. Out of 1,000 dwarf pears from the big southern nursery, first-class stock ordered, and poor stock received, there is not one healthy looking tree now, and it would have been far better economy to have thrown the whole lot on the brush heap in the first place, which seems to show that these mammoth nurseries that sell trees by the carload, are more interested in making big sales than in what becomes of the trees afterward; and further, that the stock is injured by long delays in transit. The moral is obvious.

(Continued Next Month.)

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One man with one set of tanks can thoroughly apply 1200 gallons of mixture per day. With two rigs, one man can apply 2000 gallons per day. There is nothing complicated—nothing to "balk"—nothing to get out of order. No pump cylinder comes in contact with the mixture.

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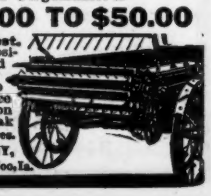


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An Extra Prize will be sent to all girls who answer this advertisement in good faith and do so promptly.

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Housekeeping Set for Dolly given free to one little girl in every home where this paper goes for a little favor. Pay no attention to other offers. Mine is better. SEND NO MONEY, but send your name today and say: "I want the Talking Doll and her outfit." Address me personally.
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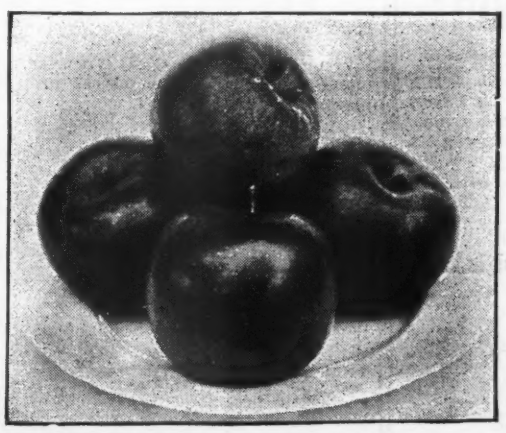
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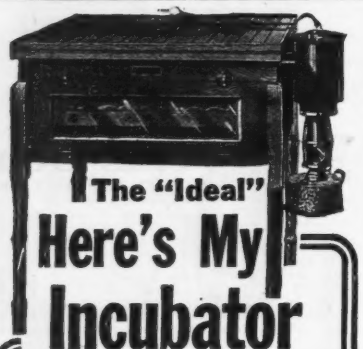
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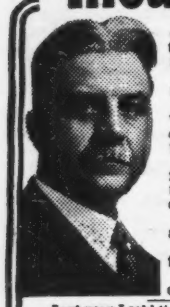
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—the greatest hatcher that ever came out of a factory.

You don't need to be an expert to run it.

It has a heating and ventilating system that *automatically* supplies the required moisture;

—A regulator that will not allow temperature to vary a fraction of a degree;

—The best nursery advantages;

—The handiest egg tray;

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Last year I sold this sure-profit-paying incubator at a price so low that I gained thousands of new customers. This year I'm going to keep up the good work and this is your chance to get my Ideal Incubator at lowest figure ever quoted on an efficient, dependable hatcher.

Here's My Proposition:

Tell me whether you are interested in a 60, 220, 175, 240 or 360-egg incubator and I'll send you my big FREE book and latest offer. In this offer

I Will Break All Records for Low Prices;
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—best safety lamp—burner, chimney, wicks, lamp bracket—all complete; also egg tester, egg trays, thermometer and thermometer holder, etc. There'll be no extras to buy. You will get the "Ideal" all ready for your eggs—all ready to make big money right from the start.

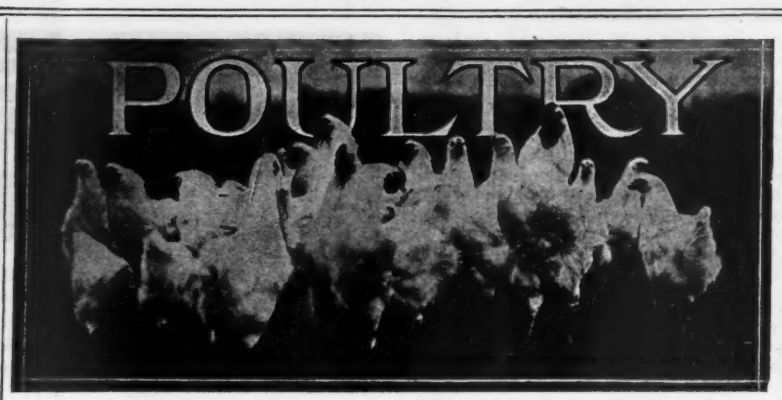
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HINTS TO POULTRY RAISERS.

Artificial and Natural Incubation and Brooding.

By Harry M. Lamon.

A well-ventilated cellar is the best place to operate the incubator.

The machine should be operated according to the manufacturer's directions.

Eggs saved for hatching purposes should not be subjected to high or low temperatures.

In cold weather place from 10 to 13 eggs under the hen; in warm weather from 13 to 15.

Always test the hen on china or nest eggs before setting.

Given proper care and attention, the hen is the most valuable incubator for the farmer.

Use insect powder freely to exterminate lice when necessary.

If several hens are set in one room, it is desirable to confine them in good nests.

Straw and hay make good nesting material.

Sitting hens should be moved at night.

Whole corn is a good feed for sitting hens. Water, grit, and dust baths should also be provided.

All eggs should be tested by the seventh day, which often makes it possible to reset some of the hens.

Toe-mark the chicks as soon as they are hatched.

Powder the chicks occasionally during the first eight weeks.

Start the brooder a day or two before putting in the chicks, to see that the heating apparatus is working properly.

Brooder lamps should be cleaned every day.

Chicks should not receive feed until they are 36 hours old.

In cool weather 10 to 13 chicks are sufficient for one hen, while in warmer weather 15 to 20 can be cared for successfully.

Never mix chicks of different ages.

Confine the hen until the chicks are weaned.

The coop for hens and chicks should be well ventilated, easy to clean, and of sufficient proportions to insure comfort.

POULTRY HOUSES AND FIXTURES.

Select a location that has natural drainage away from the building.

A dry, porous soil, such as sand or gravelly loam, is preferable to a clay soil.

In most localities the building should face the south, as this insures the greatest amount of sunlight during the winter.

Allow at least 2 square feet of floor space per bird.

Proper ventilation and sunlight mean a dry house and healthy birds.

The partial open-front house is conceded to be the best type for most sections.

The colony plan of housing poultry may be adopted to good advantage on many farms. This system does away with the danger of tainted soil.

The roosts should be built on the same level, 2 feet 6 inches from the floor, with a droppingboard about 8 inches below them.

Good roosts may be made of 2 by 2 inch material with upper edges rounded.

The nests may be placed on the side walls or under the dropping boards. It is best to have them darkened, as the hens prefer a secluded place in which to lay.

FEEDING.

In order to obtain eggs it is necessary to have healthy, vigorous stock, properly fed.

A splendid mixture for laying hens is equal parts of cracked corn, wheat, and oats, which should be scattered in the litter.

Bran or middlings and beef scraps should be kept in receptacles to which the fowls have access at all times.

Plenty of exercise increases the egg yield.

Provide 4 or 5 feet of good, clean litter in which to scatter the grain.

Cabbages, mangels, potatoes, etc., make excellent green feed.

When wet mashes are fed, be sure they are crumbly and not sticky.

For the first three days chicks may be be fed a mixture of equal parts hard-boiled eggs and stale bread, or stale bread soaked in milk. When bread and milk are used, care should be exercised to squeeze all milk out of the bread. From the third or fourth day until the chicks can eat wheat and cracked corn, commercial chick feed is a good ration.

Plenty of pure, fresh water, grit, shell, and green feed should be available from the first day.

Feed the chickens about five times daly and only what they will eat up clean in a few minutes, except at night, when they should receive all they want.

EGG PRODUCTION.

Produce the infertile egg.

Infertile eggs are produced by hens having no male birds with them.

Removing the male bird has no influence on the number of eggs laid by the hens.

The hen's greatest profit-producing period is the first and second years, and unless a hen is an exceptionally good breeder she should be disposed of at the end of her second laying season and before starting to molt.

If possible, mark the pullets that lay in the fall, and use them in the breeding pen for the following spring.

Soft-shelled eggs are often caused by fowls being confined, becoming overfat, and from lack of mineral matter.

MARKETING.

Uniform products command the best prices. Pure bred fowls produce uniform products.

Begin marketing the cockerels as soon as they weigh 1 1-2 pounds or attain a marketable weight.

When selling the eggs to the country merchant or cash buyer, insist that the transaction be on a quality basis.

Ship or deliver eggs twice or three times weekly.

Small or dirty eggs should be used at home.

When taking eggs to market they should be protected from the sun's rays.

Infertile eggs will withstand marketing conditions much better than fertile eggs.

LICE AND MITES.

The free use of an effective lice powder is always in order.

A dust bath is very essential in ridding the fowls of lice.

In applying powder hold the fowl by the feet, head down, and work the powder well down into the feathers.

The free use of kerosene on the roosts and in the cracks will exterminate mites.

Whitewash is very effective against vermin.

COMMON DISEASES AND TREATMENT.

All diseased birds should be isolated.

Colds and roup.—Disinfect the drinking water as follows: To each gallon of water add the amount of potassium permanganate that will remain on the surface of a dime.

Chicken pox.—Apply a touch of iodine and carbolated vaseline to each sore.

Gapes.—New ground and vigorous cultivation will often remedy this trouble.

Scaly legs.—Apply vaseline to the affected parts, and after 24 hours soak in warm soapy water. Repeat treatment until cured.

Diarrhoea in hens.—Low-grade wheat flour or midlings is good for this trouble.

Bowel trouble in chicks.—Well-boiled rice mixed with a little charcoal will often check this complaint.

RULES.

It is urged that all farmers and poultrymen adhere strictly to the following rules in handling their poultry and eggs:

1. Keep the nests clean; provide one nest for every four hens.
2. Gather the eggs twice daily.
3. Keep the eggs in a cool, dry room or cellar.
4. Market the eggs at least twice a week.
5. Sell, kill, or confine all male birds as soon as the hatching season is over.—From U. S. Bulletin.

"Fun On The Farm."

Some say that farming is all hard work, but C. A. Green did not find it so. Both he and his city wife were never happier than during the years spent on a farm near Rochester, N. Y., which they converted into a Fruit Farm. C. A. Green's booklet, "How I Made the Old Farm Pay," gives a full account of their experience. Price postpaid twenty-five cents.

"Yes, clean yer house an' clean yer shed,
An' clean yer barn in ev'ry part.
But brush the cobwebs from yer head,
An' sweep the snowbanks from yer heart.
Yes, w'en spring cleaning comes aroun'
Bring forth the duster an' the broom,
But rake yer foggy notions down,
An' sweep yer dusty soul of gloom."
—Sam Walter Foss.

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By feeding raw bone. Its egg-producing value is four times that of grain. Eggs more fertile, chicks more vigorous, broilers earlier, fowls heavier, profits larger.

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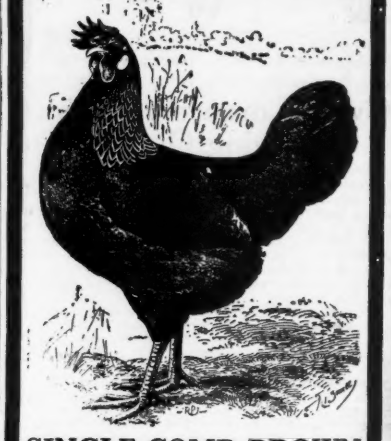
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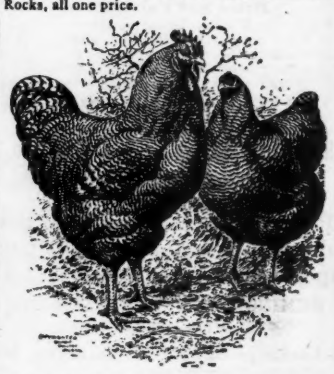
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This breed is as solid as its name and is often called the "Farmer's Friend," the "All 'Round Fowl," the "Old Reliable." It is the bird for business, and deemed by many the best fowl for farm and home raising. It is not only a good layer, but is quick to develop for the early market. As a far-sighted farmer once said to us, "When you kill one you've got something."

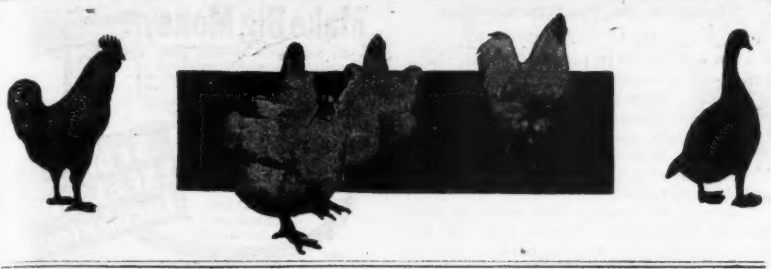
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Keep the Hens Tame.

Written for Green's Fruit Grower by Frank I. Hanson.

On many farms the hens are but a few degrees less wild than hawks. Entering the houses or yards means a commotion—deafening, cackling and choking clouds of dust raised by their flying hither and thither in great fright. Particularly is this true where poultry is more or less a side issue and little attention is paid to them, outside of rather hap-hazard feeding and gathering the few eggs.

A man would not think of having his horses or cows so wild that he could not get his hands upon them, except by extreme strategy. Then why should he allow his poultry to be so? It all depends upon the manner in which they have been



A Promising Beginner.

managed. There seems but small reason why one should not be able to pick out any member of the flock, at with very little effort.

The advantage of having the hens tame are many. They can be examined for signs of disease or vermin and insect powder applied with little trouble. Their fitness for market can be determined accurately.

Leg bands (for of course they are used)—can be adjusted and examined at will. If one is wanted for the Sunday dinner how convenient to select one quietly instead of choosing from a distance and then "running down" the poor bird. This method of capturing a fowl is cruel and wholly unnecessary. When showing them to visitors it is a credit to have the flock gather around quietly.

A frightened nervous flock is never on the best paying basis, so no time should be lost in taming them. Never allow them to be frightened or subjected to any unusual treatment. Enter their quarters quietly and handle them easily. Scatter a few handfuls of grain frequently to coax them toward you. Hens though inclined to be timid are quick to gain confidence under gentle treatment.

Editor's Note:—While the above good advice relates to poultry it will apply to all the live stock on every farm.

A Good Egg.

An egg may be fresh, and yet not be a good egg. There is all the difference between an egg from a hen well fed on clean food and one from a hen that acts as a scavenger, says Virginia Farmer and Grange Advocate. A hen that hustles for herself on poor range lays a watery egg, an egg lacking in protein. A hen that is fed on clover, wheat bran and sound grains lays an egg with a rich, delicately flavored white. If the hen lacks in fat forming feeds, the chances are that the egg will be lacking in the same elements. If the shell breaks in our hands, the eggs is lacking in lime, and if hatched will probably give a weakling chick, subject to white diarrhoea from the start, and quite unlikely to reach the anniversary of its first week.

Healthy appearing hens often lay eggs that can not be called good if their quality and flavor is considered. Watch your eggs, know what kind of an egg your hens are laying, and get them as near perfect as possible before hatching time. An egg with a good shell, and which stands up well in poaching, or tastes well beaten in milk, is a delicacy which will always be in demand. Given the right kind of hen, with the right kind of food, clean nests and runs, and not more than a week in reaching the consumer in the winter, the poultry breeder can furnish an almost perfect food, fit for the most delicate invalid or the stoutest man.

—o—

See that the males get enough food. A tin cup nailed just out of reach of the hens for the cock's meals may mean the difference between vigor and infertility in the spring. Fill the cup each meal time.

—o—

The color of the eggs sold today is considerably darker than they averaged thirty years ago, all of which proves that Asiatic blood has been largely introduced throughout the country, and that it has its effect on the egg.

—o—

If the day's deeds were as short lived as the day, we might afford to pay little heed to them. But they are not. When Time shall be but a memory they will still live.

—o—

When Hens Lay Eggs.

The question as to what time in the day a hen lays has puzzled poultry fanciers for unnumbered decades, but now, it seems, it has been satisfactorily solved by a woman, says The Weekly Sun. She is Mrs. Sarah Erickson, of Falconer, Eng. Having kept chickens for thirty-seven years, she believes she qualifies as an expert in this line of effort.

"I have worked out the problem," she declares. "By using marked leg-bands, trapnests I have determined that a hen lays an egg at the same hour, minute, and second that she was born—or, rather-hatched. For instance, if the hen happened to be able to peck its way through its shell at 7.43 a.m., she will lay an egg at precisely 7.43 a. m. And she will do this without variation every time she is inclined to lay. I have kept, close systematic watch on my hens for five years, and I have never known the rule to fail."

—o—

EGGS AT 72 CENTS, PER 12. WILL BE HIGHER YET.

New Fall Record Prices Quoted in New York City.

Fancy brands of fresh eggs made a new high fall record, November 14, when they sold for 72 cents a dozen. They will go still higher before the winter is over, dealers said.

As against 60 cents a dozen wholesale for nearby fresh eggs, Western fresh eggs are selling here wholesale at 38 to 41 cents a dozen and first class storage eggs are laterally going a begging at 24 cents a dozen. Under the new law the dealers are obliged to label storage eggs, and housewives, who can afford to pay the higher prices, usually refuse to purchase the storage variety.

Unless customers change their minds the egg speculators of New York stand to lose from $500,000 to $1,500,000 in next spring on storage eggs.

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"Gosh!" exclaimed M. Weinig, a farmer when apprised that fresh eggs had soared to 72 cents a dozen in New York. "Why don't they take a green tip," he added, "and do as I do. I feed the hens buckwheat in the morning, That warms 'em up. Then give them dried corn on the cob. By the time they get it pecked off they are ready to lay. It's the best recipes to make hens lay I know of. Take it from me on the eggs."

—o—

The Dust-Bath.

In every poultry-house there should be a dust-bath, where the hens may get rid of lice. Poultry-lice breathe through pores in their sides, and fine dust fills these pores and suffocates the vermin. Road-dust, hard-coal ashes, or dry dirt of any kind, will accomplish the purpose. Wood ashes, if damp, may stain the feathers and otherwise harm the fowls. Sometimes, if the hens are badly infested, Persian insect-powder may be added to the material in the dust-bath. A tight box, 3 feet by 3 feet, and one foot deep, is a good receptacle for the dust. It should be placed where the sun can shine on it, as many hours as possible; for, when the hens are not exercising by scratching for their feed, they will spend a good deal of time in the dust-bath, which induces exercise. The hens will not use the bath freely unless the air is warm, for they dislike to open their feathers and expose their bodies to air below 60 degrees.

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The Color of Yolks of Eggs.

Is there any connection between the color of an egg-yolk and its nutritive qualities? The general popular impression is that the darker yolks are the richer, but there seems to be no exact experimental evidence either for or against this view. Two recent opinions are quoted by the Revue Scientifique (Paris, May 4). Says this paper. "Every one has noticed how the coloration of the yolks varies from one egg to another, shading from very pale yellow to reddish orange. The literature treating of hen's eggs is very large yet few writers have been attracted by this question of coloration. Noticing, several years ago, that the observed differences of color are without any effect on the intrinsic qualities of the yolk, which remains equally nutritive and equally valuable in reproduction, Morris attributed the inital cause of the color to the nature of the food."

"Starting with the fact that it is paler in winter and with hens living in unscientific quarters, he inferred from this that the more intense coloration of the yolks of eggs laid by hens living at liberty was due to the coloring-matter of the green plants, and of the insects that these fowls eat in large quantities. After complex chemical transformations these pigments from the foodstuffs reach the ovary, whose fatty cells fix it, owing to a special affinity. Consequently hens should be placed in better conditions of life, by giving them spacious grassy runways, and during the winter supplying them, in the absence of fresh food, with grain, salad, cabbage, beets, and carrots, crushed or finely chopped."

He goes on: "L'Acclimatation (Feb. 11) tells us that, after repeated complaints from their customers, certain associations



Spring Valley Farm, Hart, Mich.

of English breeders have drawn the attention of producers to the desirability of obtaining yolks of a higher color, and hence more nutritive, by placing the hens in proper conditions of hygiene and nutrition, and by giving them water having iron in solution, twice a week. This thesis, which is very different, as may be seen, from that of Mr. Morris, attributes to the coloration of the yolks an influence on their nutritive power, and recognizes as its cause their content in iron."—Translation made for The Literary Digest.

—o—

Farmers ought all keep pure-bred poultry—become real poultry fanciers—with benefit to themselves. It is too late in the day to put forth any arguments about the advantages of well-bred poultry. Every progressive farmer knows that pure-bred poultry must be better than the common kind. The reason all farmers do not keep really well-bred poultry is that so many of them are engrossed in other branches of their business, and give the poultry rather less time than they should.

—o—

Perhaps it is just as well to take things as they come, provided you are satisfied with very little.

Ironclad A WINNER in 1911 and 1912 National Hatching Contests

Mrs. C. F. Merrick, Lockney, Tex., with her 140 egg Ironclad Incubator wins in the Mo. Valley Farmer and Nebr. Farm Journal Big Hatching Contest in 1912. She placed 145 eggs in the incubator and hatched 143 strong chicks. Think of that! You can now get those famous winners. Ironclad also won in 1911 Contest.

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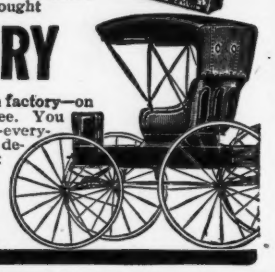


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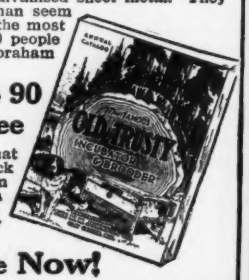
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The new Johnson book tells all the facts. Send your name on a postal and get your copy at once. If others are a catalog—Johnson's is a *book*—and if others are books, Johnson's is a whole library of chicken facts. Don't miss it. Write your postal or letter *NOW*, to

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Thoughts on Poultry Keeping.

By C. A. Green.

I am interested in poultry. I am thankful that in some past age thousands of years ago, some man was thoughtful and considerate enough to tame the wild fowl of the jungle and to make this bird the companion of mankind and the producer of delicacies for the table of man through untold generations.

There must be the first man in every human enterprise. There was the first man to build a house, the first man to put windows in the house, the first man to put a chimney in the house, and the first man to plant seeds, that is the first agriculturist.

I am a fruit grower. I find that fruit growing and poultry keeping work well together. My peach and plum trees and other fruits thrive better in the poultry yard than in any other place and require no cultivation in the poultry yard, for every spear of grass or weed is cut down by the chickens.

I remember well the time when no one thought of incubators in this country, when the mother hen alone was relied upon to hatch out her brood, which she protected successfully from the rats and hawks of those early days. A great advance in poultry keeping was made by the introduction of the incubator, which does not, however, seem to be entirely of recent origin, for we find records of incubation way back in India thousands of years ago. The sands of the shores of the Amazon, the Mississippi and other small rivers furnish evidence of natural incubators, for do not the turtles bury their eggs in the warm sands along these streams and leave them there to be hatched by the warmth of the sun. Therefore I marvel that incubators were not more freely used at an earlier date.

The first incubator, like the first reaping machine or harvester, was a crude affair. I can remember on my father's farm how many reaping machines were cast into the fence corner owing to defects in construction. The same thing has happened with the early incubators, but now we have the perfected incubator.

At Green's Fruit Farm we have many incubators which have been in successful operation for several years.

—o—

Cures for Chicks.

A little more elbow grease used in keeping the premises clean will often prevent disease.

The wide awake, ever watchful poultryman is seldom troubled with sickness among his fowls.

A little granulated charcoal mixed in the soft feed is excellent in cases of diarrhoea.

A London remedy for roup is about three drops of camphor on a piece of bread.

Those who have tried it claim that a teaspoonful of Venetian red in a gallon of drinking water is a good bowel trouble preventative.

Dampness and contaminated ground are fruitful causes of disease. The quarters should be dry as a chip, and the ground in the runs perfectly pure.

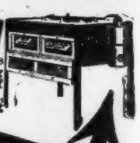
There is a tendency among poultrymen to belittle the old-time advice to whitewash the interior of the poultry houses. Nevertheless, we keep on whitewashing once or twice a year, and find that it prevents dampness, purifies the place, kills vermin and makes the houses look neat and inviting.

The best cure for a well developed case of roup is the axe. Better lose the individual bird than to endanger the entire flock. If we nip the slight colds in the bud wo need not fear the appearance of roup.

The heavy feeding of corn, especially where there is an absence of good, hard, sharp grit, will bring on bad cases of indigestion, which in many ways resembles cholera. About 92 cases out of 100 reported cholera victims are cases of indigestion. The end is the same, but the latter disease is not contagious.

Extras, number ones, dirties, checks, spots, leakers and rots, that is the way, or so we are told that eggs are classified in Chicago by some concerns which handle them in carload lots. That is a completer classification than the world has yet evolved for human beings, based on their varying degrees of moral worth, for heretofore all men like all eggs fell into two broad divisions only—good and bad. Many old fashioned, simple folk may have fancied that an egg which had deteriorated below the second stage had neither edible nor saleable value and was therefore not entitled to any commercial rating. This used to be so at any rate out in the unspoiled country where good men aimed to sell good eggs only, and bad men did not venture to run too many eggs of questionable age into the basket. But cold storage has changed all this, and an egg no longer goes to the bad all at once but deteriorates by less perceptible degrees. What our language still lacks is an analogous classification to fit the dealers who handle them, as, for example, reputable, shrewd, crafty, unscrupulous, villanous, abominable, utterly debased.

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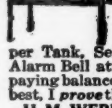
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American Apples in Germany.

The splendid apple crop now ripening in the orchards of Western New York is this year, more than ever, able to substantiate its claims for superiority in taste and keeping qualities. It remains for the orchardists, singly or in concerted action through co-operative marketing societies, to profit by the lesson of last winter and furnish an honest pack of perfect fruit in order to live down the feeling of distrust that eastern apples have caused in Germany. Consul-General Skinner, of Hamburg, testified last spring that "the apples coming from the eastern part of the United States landed in the beginning in good condition and sold at very satisfactory prices. This, however, lasted only for a few weeks, since which all arrivals have landed in more or less bad condition." He also said that "apples from the Eastern states packed and shipped in barrels were very often not honestly and carefully graded." Against this he cites Western packing methods.

Happy.—The birds are happy. The wild creatures of the forest are happy; the toiling peasant too is happy—and the multimillionaire is frequently the most miserable of beings. Duty and joy are the forgers of human felicity. Happiness is here, if we only knew it. Let us not desire the unattainable, the impossible. Let us taste "the innocent sweetness of a new-born day" and acknowledge its loveliness. Let us not even be terrified by death which is only the glorious night that comes after a happy day.

Cow Drags Boy to Death, Fast to Rope.

With one end of rope tied to his wrists and the other end to a runaway cow, Leo Sprout, 14 years old, son of Mr. and Mrs. Joseph Sprout, who live about one mile from Chest Springs, was dragged over sharp rocks for one-fourth of a mile and so badly injured that he died within a half hour.

Becoming frightened at a passing automobile, the cow started suddenly on a dash down a rocky lane. The boy's attention was attracted to the auto, and he was not prepared for the sudden jerk given by the cow.

A loop in the rope was around his wrist, and he could not get loose. He fell on his face, and as the cow tore down the lane his face, head and body were dashed against the sharp rocks. His clothing was stripped from his body, and even his shoes were torn off.

Questions of a Little Child.

Written for Green's Fruit Grower by Calvin Forbes, Mich.

One warm evening in the early summer, just after the stars began to appear, I sat in my chair near the porch looking starward, when a bright little girl of only eight years came and climbed on my knee and said she wanted to see the stars shoot.

While she was learning the names of the different stars and planets, she asked me to answer these questions:

"Are those stars all worlds like this one?" "Yes", I answered, "they are all worlds, but some of them are many times larger than this one."

"Did God make all of these worlds?"

"Yes; some great power that we cannot quite understand, that we call God, has made and keeps them all in place."

"If God made all of these worlds, who is God's mother?"

I had thought these things over a great many times, but had never been asked that question before. I could not give a good straight answer, for I did not know, but I did not tell her a lie.

The next question that came was, "Where is heaven?"

"Well, little one, men have made some very large telescopes and by them have learned a great many things, but they have never found any place that was any nearer heaven than this spot right here on earth. When you do just what you know to be right, and are perfectly satisfied and happy, heaven is within yourself.

She looked out into space for a few moments, and I wondered what was going on in her mind, when she asked, "Well then, where is hell?"

This was also a hard place to locate, but I told her the truth when I said to her, "Bless your dear heart, there is no such place."

Butterfly Money.—A young school mistress in California after completing her course in a normal school accidentally hit on a plan to make a livelihood that put all thoughts of school teaching out of her head. During the vacation, she became interested in a collection of showy butterflies that her father had collected years before and remembering how interested tourists always were in butterflies, she decided to try her hand at raising them. According to reports, in six weeks she had propagated over six million butterflies for which she received five cents apiece. Some one else can figure up her total income during those six months.

Each a Lucky Car

By R. E. Olds. Designer

In every make an occasional car proves almost trouble-proof. No breakdowns, no repairs.

The man who gets it tells his friends he got a lucky car.

But every buyer of Reo the Fifth gets a lucky car. This is how I insure it.

How I Do It

A lucky car means simply a car built with proper care and caution. I have spent 26 years in learning all that is necessary.

I have all of my steel made to formula. Then every lot is analyzed twice to prove its accord with the formula.

Then the finished parts are tested. In every part I require over-capacity, not less than 50 per cent.

The gears are tested in a crushing machine, to prove that each tooth will stand 75,000 pounds.

Springs are tested in another machine for 100,000 vibrations

Added Cost

I use big tires—34x4—to save you tire expense and trouble. This year, by adding 30 per cent to my tire cost, I have added 65 per cent to the average tire mileage.

I use in this car 190 drop forgings, to avoid all hidden flaws. Steel castings would cost half as much.

I use 15 roller bearings—11 of them Timken, 4 Hyatt High Duty. The usual ball bearings cost one-fifth as much, but ball bearings often break.

I use a $75 magneto to save ignition troubles.

I doubly heat my carburetor—with hot air and hot water—to deal with low-grade gasoline.

I use a centrifugal pump, instead of a syphon, to insure positive circulation.

I use 14-inch brake drums for safety. Also seven-leaf springs, two inches wide.

1,000 Tests

The various parts of this car, during the making, get a thousand tests and inspections.

Each engine, for instance, is tested 48 hours—20 hours on blocks, 28 hours in the chassis.

Fitted parts are ground over and over, until we get utter exactness.

Each body is finished with 17 coats. It is deeply upholstered with genuine leather, filled with the best curled hair.

The electric dash lights are set flush with the dashboard. Thus the car's appearance shows the care we use.

Center Control

No other car has such easy control as you find in this Reo the Fifth.

All the gear shifting is done by moving a handle only three inches in each of four directions.

Both brakes are operated by foot pedals. So the car has no levers, either side or center, to clog the way in front.

You get in this car the wanted left side drive. The driver sits close to the cars he passes. Yet you shift the gears with your right hand, just as with the old right hand drive.

Costs Me $200 Per Car

Reo the Fifth, without these precautions, could be easily built for $200 less. For the first few months you might not know the difference. But in years to come this skimping might cost you several times $200.

I know this well, for I have built cars for 26 years — over 60,000 of them. I know the cause of troubles.

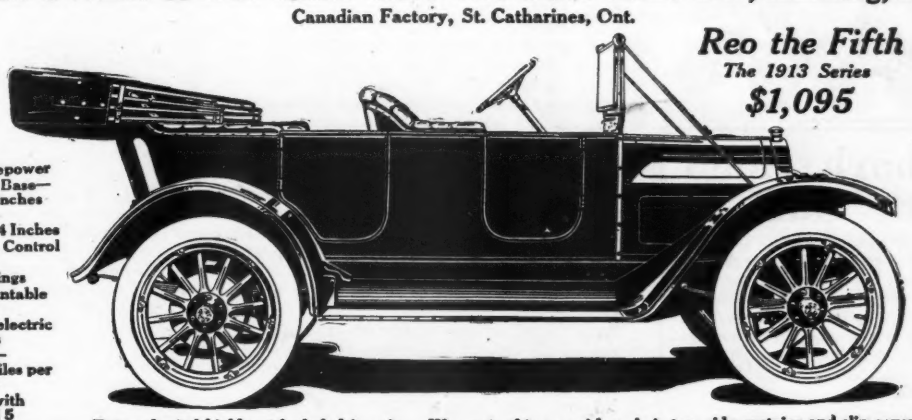
I save this $200 per car by building only one model, by building all my own parts, by wonderful factory efficiency. And I put that saving into these extremes, to save you after-cost.

If you think that it pays to have a car like this, ask us to send you the details.

Our thousand dealers now are showing the 1913 model of Reo the Fifth. Write for our catalog and we will tell you where to see the car.

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Made with 2 and 5 Passenger Bodies

Top and windshield not included in price. We equip this car with mohair top, side curtains and slip cover, windshield, gas tank for headlights, speedometer, self-starter, extra rim and brackets—all for $100 extra (list price $170).

All Animals Are White on this Farm.

What is known as a "white farm" is located near Puyallup, Wash., the owner of the place being Eugene Jacquemin, a lover of nature and livestock. For years he has been gathering together white animals and fowls, which are all housed in spotless shelters and permitted to roam within the bounds of white fences.

This "white farm" is one of the several found in other parts of the globe, and is unique because it contains many specimens of albino animals and birds, writes a correspondent of the St. Paul Dispatch.

White horses do all the farm work. White ponies play with the children. White cows furnish butter and milk. There are white hogs, sheep and goats. The pigeons, chickens, ducks, geese, turkeys and guinea fowls are all white. The guinea fowls are imported from Africa.

A novelty is a pair of peacocks, pure white. About the yard three white Spitz dogs play and white Persian cats lounge on the porches. In the orchard the farmer has an albino elk, three white deer, a mountain sheep and a polar bear cub. There are in aviaries a pure white magpie, white blackbirds, pheasants, wild swan, cranes and storks.—North American.

Lime, Ashes and Strawberries.

Is liming the soil injurious to strawberries? It has been the teaching of many small fruit experts and authorities that wood ashes and lime should not be applied to strawberry beds. Notwithstanding this prevailing belief, we have seen kitchen garden strawberry beds of which wood ashes from the house stoves had been applied in abundance, yet they were thrifty and wonderfully prolific in fruit of excellent quality. F. E. Beatty writes an article in "Fruitman and Gardener," in which he gives convincing proof that the use of lime and ashes has no injurious effect upon strawberries. Mr. Beatty says: "I have used lime and wood ashes in preparing the soil for strawberry plants and I have never noticed any injurious effects.

Diseased Fowl.

Green's Fruit Grower:—We have a small flock of chickens that have been fed on cracked corn, with vim of farm and abundance of animal food. We killed a cockerel whose flesh or fat was rough and grainy, rough and hard was all over that way inside. The liver had white spots and a hard place on it. The bird looked and seemed healthy. What was the matter with it and was it fit to eat? Please answer through next issue of Fruit Grower and oblige.—C. C. Sherrick, Mich.

Reply: I am sorry to say that I can form no opinion in the case you present of the sick bird. I would not advise eating any fowl that looks suspicious.

Will Turn the Tide Eastward.

Western farmers to come back to Central New York. Syndicate is operating. Western financiers are purchasing all farms for sale in Ontario, Seneca, Cayuga and Oneida Counties and greatly improving them.

So many Western farmers wish to return to Central New York to work farms that an extensive plan for the buying, repairing buildings, and in turn selling farms through this section had commenced. A syndicate of Omaha. Nebraska financiers has opened negotiations in this county. It intends to buy and sell farms in Ontario, Seneca, Cayuga and Oneida counties. Ten farms in Seneca county have already been purchased and Contractor Arthur Sweeting begins work on one of the places now. Thorough repairs will be made to all buildings, fences and barns. The inrush of Western farmers will begin with good weather in the spring.

The farms offered for sale in Seneca county are inspected by officials of the syndicate. They bring prospective buyers here and if the buyer agrees to purchase the farm, it is bought and the investment company lets a contract for a complete overhauling of the place according to the purchaser's ideas. The Hamill farm, just north of this village, is the first farm to be overhauled. The Monroe Hoster place is next on the schedule for improvement. Two farms near the County House, the Stahl farm and another place in Fayette have been purchased, together with several at Kendaia. Contractor Sweeting, when asked about the work today, said that he would have from ten to twenty-five men busy all winter, getting the farms ready for their new owners.

The 9-acre prune orchard owned by O. F. Short of Eagle paid the owner $4,237.89, one cent a pound. The crop was raised on a 17-year old orchard near Eagle.

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The plants, planting and care will cost you till harvest time about $60. In fifteen months your first berries are ready to be sold.

You may expect $100 return one year in five; three years in five the acre should produce $250, and the other year it should bring $400.

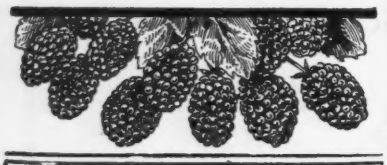
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Rhubarb Seed For Sale

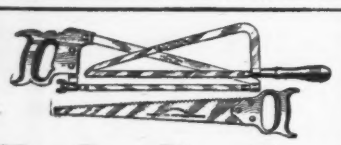
I OFFER at reduced price at 75 cents per pound freshly gathered high class rhubarb or pieplant seed. This is about half the usual price charged for this seed. Do not delay if you wish to get a bargain in rhubarb seed, which can be sown any time this fall or next spring. There is no difficulty in growing rhubarb from this seed. If mailed add 16 cents per lb. for postage.

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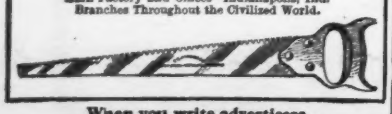
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allow you to get right up to the trunk. Their thin, flexible blade is tempered to suit any tree and leaves a cut that always heals quickly and without harm to the tree. Atkins Pruning Saws are made of the famous Silver Steel that goes into all Atkins products. That insures a cutting edge that is always sharp.

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Please mention Green's Fruit Grower.

Have You Ever Eaten a High Grade Apple?

By C. A. Green.

Last evening at a social gathering I met an intelligent gentleman, a fruit grower, who had lived for many years in a section of Western New York near Rochester famous for its production of large quantities of beautiful apples selling in the market at fancy prices.

In the discussion of varieties which followed, I asked this man if he had eaten Wismer's Dessert apple.

"No," he replied, "I never heard of it."

"Have you eaten the Melon apple?" I asked.

"No," was the reply, "I have never heard of that variety."

"Have you ever eaten a Banana apple?" I asked.

"I have heard of the Banana apple but never saw or ate one."

He said he was familiar with the Fameuse or Snow apple. He considered the Twenty Ounce an excellent apple to eat. The principal apples grown in his section are the Baldwin and King, apples of ordinary quality and flavor. He probably had but slight acquaintance with the Hubbardston, which is far better than Baldwin or King, but is not of the finest quality.

I am persuaded, from my interview with this fruit grower and with other fruit growers and apple dealers, that there are but few people in this country who have ever eaten apples of high quality.

I am certain that the public at large have no knowledge of the high grade apples and that if they should go into the store of a fancy apple dealer not one person in a thousand would know what apple to pick out from a collection of a dozen or more in order to get an apple of good quality. My opinion is that most people would be apt to pick out a handsome Ben Davis, one of the poorest of apples, judging the fruit entirely by its beautiful color and shape and not by its name or by its reputation as a fruit of high quality.

The best eating apples sold in the fancy fruit stands and stores are Stayman's Winesap, Delicious, Jonathan, Grimes' Golden, Spitzenberg and Winesap. These are all superior apples, though for myself I never greatly fancied the Spitzenberg.

What lamentable ignorance is displayed on the part of the public on the subject of varieties of apples worth eating. The apple is the king of fruits and still not one person in a thousand knows when he sees an apple fit to eat, and to whom an apple is an apple, as it is said:

"A primrose on the river's brim
A simple primrose is to him
And nothing more."

I have in my cellar a notable display of superior eating apples that have been sent to me from Green's Fruit Farm for my own eating during the coming winter. I will name some of them in the order of ripening.

First, there is the Fameuse or Snow apple, a delightful reddish apple of smallish or medium size with white tender subacid flesh. This apple is better known throughout the country by apple consumers than any of the other high grade apples.

Next in order of ripening is the Melon apple, of good size, yellow skin striped and splashed with red. Flesh yellow. A delightful subacid fruit, one of the very best.

Next is the Blenheim, known sometimes as the Blenheim Orange, also known as the Lord Nelson, an English apple of large size, yellow skin splashed and streaked with red, an early winter apple of good fair quality, not so highly flavored as many of the others I shall name. This is an abundant bearer, a tree of vigorous growth one of the best sellers we have.

Next to ripen is Wismer's Dessert. Yellow skin, striped and splashed with red, white flesh, something like Melon, but not ripening quite so early, slightly better in quality than Melon.

Next in ripening is Jacob's Sweet. If you like sweet apples you cannot go astray on Jacob's Sweet. It is of large size, golden yellow, very attractive in appearance.

Next we have the Banana apple. We have grown the Banana apple for nearly thirty years and yet it is scarcely known in the eastern and middle states. It has been grown successfully on the Pacific coast where bushel boxes have sold as high as $12.00 each. The skin is a beautiful golden color. The flesh is of yellowish cast. It is of large size and of fine quality, the flavor somewhat resembling the banana. This variety is productive and the tree vigorous as grown at Green's Fruit Farm.

The above are a few of over a hundred rare varieties of apples which we have growing and producing fruit at Green's Fruit Farm.

Here is the point I am getting at:—If the apple eaters and apple buyers of this county were familiar with the superior class of apples such as I have mentioned, and there are many others, apple eating in this country would be increased one hundred fold, for these superior apples by most people would be more greatly desired than the finest orange, pear or other fruit attainable in the late fall and winter months. But as long as the public is ignorant and has no knowledge of these superior varieties and does not know that such varieties exist, what chance is there for producing these superior varieties when it cannot be expected that one will grow as many barrels of Grimes' Golden or Fameuse per tree as one can of the Baldwin, and yet in some instances these high class apples yield as abundantly as the inferior varieties.

NOT TOO MANY ORCHARDS.

With Present Transportation Facilities and Local Markets, Apples Need Not go To Waste.

J. W. Ingham of Pennsylvania in Tribune Farmer, says some people have expressed fears that too many orchards were being planted, that the apple business will be soon overdone, and the price, when sales can be made, will be less than the cost of picking the fruit from the trees. There is considerable plausibility in their reasoning. Apple trees when well cared for will live and bear to great age in the Eastern states, and to set out new orchards and raise more apples than the increase of population required would be a losing business.

The country is becoming more populous, the population is increasing, the people have more money to buy fruit and are consuming more than ever before. The means of transportation are excellent. The country is gridironed with railroads and steamship lines have been established to all civilized countries. The foreign demand for American apples is large now and constantly increasing in the bearing years, when we have them to spare. In the year 1906, 1,208,989 barrels of apples were exported from the United States to foreign countries; in 1907 1,539,267 barrels, and a little falling off in 1910. The average annual exportation of dried apples for the last five years was 30,000,000 pounds.

Some orchardists have been alarmed because apples have been shipped to New York, Philadelphia and Boston from the far off states of Washington, Oregon and California. Their fears are groundless. The long mileage by railroad will prove an effectual barrier against the Pacific competition whenever the Eastern orchardists employ their natural advantages and take possession of the field. The fact is, the soil and climate of Ohio, New York, Pennsylvania, New Jersey, Maryland, Virginia and other Eastern states for raising apples are equal in every respect to the Pacific states, or any country in the world.

Heavy, bulky products such as potatoes and sugar beets, on which the freight charge is proportionately larger, should be grown as near the market as possible.

Grow Apples at Home.

I have just returned from a trip covering the greater part of Ohio and I have seen as fine apples as ever grew in any country. Fine color, and flavor—well, they tasted just like they used to when I was a bare-foot boy. Just a few years ago it was thought that the apple was a thing of the past in Ohio, says The Farmer's Guide.

But the experiment station got real busy and showed a few growers how to grow apples again. They sprayed, pruned and cultivated and the results were so marked that the business took on a new life. Now every one who owns ten or more fruit trees must spray them or suffer prosecution. Apple orchards in Ohio, mean something now and can be purchased as cheaply as the distant lands so widely advertised; then when you pack your apples in the central states you are a thousand miles nearer market than the fellow who is roughing it on the Pacific slope. Better stick around home a while longer, the rainbow usually comes down pretty close and there's a pile of yellow Bellflowers just where it comes down—if you'll plant and care for the tree.—Val E. Dombaugh, Ohio.

Black knot, a fungous disease of cherries and plums, is controlled by cutting out and burning all evidences of the knot several times a year; and by using bordeaux mixture once late in winter, again when buds begin to swell, and two or three applications at intervals of ten days. The best time to find disease bunches is when the foliage is gone.—Pennsylvania Farmer.

You Can Pay More But You Cannot Buy Better Than
OKEY BRAND SPRAYS THAT PAYS **SCALE KILLER**
(SOLUBLE OIL)
Easily Applied—Simply Mix With Water and Spray
Barrels (50 gal.)....$15.00 1-2 bbl. (30 gal.) $9.00
10-gal. can and case 3.50 5-gal. can and case 2.00
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OUR SPECIALTY

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The Berlin Fruit Box Company,
Berlin Heights, Ohio.

SPRAY TOWER That holds extension rod. Reaches highest branches. No climbing. Operate from wagon bed. Free Catalog. F. G. HAYES, 131 Ohio St., Sharon, Pa.

Tree Protectors

Protect your trees from mice and rabbits. Price $1.00 per 100; $4.00 per 500; $7.00 per 1000.

Green's Nursery Co.
Supply Dept. Rochester, N. Y.

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Remarkable Discovery That Cuts Down the Cost of Paint Seventy-Five Per Cent.

A Free Trial Package is Mailed to Everyone Who Writes.

A. L. Rice, a prominent manufacturer of Adams, N. Y., has discovered a process of making a new kind of paint without the use of oil. He calls it Powderpaint. It comes in the form of a dry powder and all that it requires is cold water to make a paint weather proof, fire proof and as durable as oil paint. It adhears to any surface, wood, stone or brick, spreads and looks like oil paint and costs about one-fourth as much.

Write to Mr. A. L. Rice, Manuf'r., 16 North St., Adams, N. Y., and we will send you a free trial package, also color card and full information showing you how you can save a good many dollars. Write today.

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Clears 1 to 5 Acres Daily

The Mighty Monarch Steel Stump Puller outwears and outpulls all others. 17 years experience has proved it! The *only* stump puller in the world equipped with Genuine "Red Strand" Steel Wire Rope. Send for big catalog. It's worth money to you if have only a few stumps. Act! (25)
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10 to 50% more money for you to ship Raw Fur, Horse and Cattle Hides to us than to sell at home. Write for Price List, market report, shipping tags.
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SKUNKS
AND ALL OTHER FURS
We want them. If you have never written to us for a price list, do so at once, and be kept posted throughout the season. We want furs from the Eastern States and Canada only. Address
Charles A. Kaune,
294 Bridge
Montgomery, N. Y.

Glimpse of the Farm Life of a Father, Mother and Two Little Ones.

By Charles A. Green.

As I was driving from my home in Rochester, N. Y., down to the center of the city, I saw approaching me a young farmer and his wife in a single seated carriage propelled by one horse.

As they came nearer to me and passed, I saw, seated on the floor of the one-horse-carriage at the feet of the father and mother and facing the man and his wife, two children warmly and attractively clad, wearing white wooly hoods from which peeped out two bright happy childish faces.

There is nothing unusual or striking about this scene and this event to most people, but to me there is much in it of interest and much that I could write about had I the time at my disposal.

I was interested in this young couple for the reason that I have been placed in precisely the same position in which they were placed, therefore I gave the faces of this man and wife careful study for the moment.

Here are a young married couple just starting out on the voyage of life. They have a little farm for which they are in debt. The father and mother are struggling and saving the pennies and the dimes to pay off the mortgage. They are interested in the society and the events occurring about their farm home, the church, the school, the improvement of the roads, the improvement of the fences of the farm houses, and of the farm itself. The welfare of this great country is built up and sustained largely by such people as these, humble as they are and unassuming.

The day is fine and the young farmer says to his wife: "Julia, let's take a drive tomorrow to the city. You have some purchases to make for the winter and I have some also. Instead of going in the big farm wagon with a load of potatoes or wheat, we will hitch the pony to the light carriage and take a day off for rest and recreation."

"But there is no one to leave the children with," says Julia, for she has no housemaid and does not feel that she can afford to employ one so long as they are in debt.

"We will take the children with us," replied the farmer.

I can imagine, since I have gone through all this experience myself as a youngster on the farm and as a father, the bright anticipations of this young couple, and especially of the little folks, in looking forward to the pleasure they are to have in seeing the sights of the big city, of visiting the stores and looking in at the windows where so many bright things are exhibited. Surely the city is a revelation to little folks and even to the father and mother who so seldom spend a day thus, looking about and shopping.

And when the noon hour comes and the little party goes to the restaurant for the noon meal, how strange everything appears to them. How different are the tables, the dishes and the surroundings from that which they have at home. And then the idea of being waited upon by young girls in white dresses, and the coming and going of strange people helps to make this a red letter day in the lives of our friends.

When I was a boy on the farm I recall vividly how meagre were the means of recreation and amusement. The child living in the city has many more opportunities for being amused than the child on the farm, and yet the child on the farm really enjoys its simple pastimes with as much zest as does the city child with seemingly far greater opportunities, therefore this trip taken by our rural friends, while it would have amounted to nothing for a city family, counted much for this rural family and will be remembered for weeks and months or possibly years after it has occurred.

It has been noted that the successful men of the great cities, the men who accomplish great things, have as a rule come from the farm. There is a reason for this, which seems to be that the child on the farm is not pampered. He is like the oak on the hillside which requires no covering of glass and no warmth from furnaces for its protection, but which has been accustomed to the frosts, the sleet, the snow and the winds of winter.

What can Green's Fruit Grower do for such people as I have been describing? I can tell you how similar publications affected me when I was a boy on the farm many years ago. Those were happy days and I live them over again in memory each year of my life.

The papers which my father subscribed for at that early date were due to arrive at the village postoffice nearly two miles distant on a certain night. The coming of that particular night found me waiting at the postoffice, which I had to reach on the bare back of a pony, waiting anxiously for the stage coach drawn by four horses to appear. I remember in some instances that I could hardly wait for the postmaster to sort over this mail and place it in the individual boxes, so anxious was I to learn how some continued story was to terminate, or to read of something of even greater importance in these publications, and yet I was at that time but little more than a child. Do not doubt for a moment that the magazines and other publications which enter your homes have a definite purpose and cannot fail in helping to form character in every member of the household.



This little girl, a member of a subscriber's family, has two pets. She is in doubt as to whether she thinks most of the lamb or the kitten.

Town Plants Cherry Trees.

An interesting experiment in civic advancement has been inaugurated in the town of Burlington, Wash., says Orchard and Farm—Irrigation. At a recent election this town went "dry," and, in order to secure a revenue to offset the loss of saloon license money, the council decided to make use of public grounds and highways by planting thousands of cherry trees, the cherry having been established as the most practical tree crop for that section. The town will care for and harvest the crop, and it is estimated that at the end of ten years a large part of Burlington's civic expenses will be paid for out of the revenue from the cherry crop.

The interesting side of this experiment, however, is that it supplements in a practical way the movement now growing in the east—the ideal planning or rearrangement of town centers and highways. Country folk are coming to the realization that their roads, though actually belonging to the state, virtually belong to the people of the community. The pride in community matters is an estimable one, for so far as the individual is concerned it is unselfish. Farmers are now caring for the highways in front of their homes because they consider it a duty to the township and an asset to their places.

In many parts of Europe roadside fruit trees are a source of regular income, yielding in some instances over $500 an acre. Granges have recommended the planting of such trees along the highways for the beauty that they lead to surroundings. If the idea of beauty can be supplemented by the idea of Burlington's harvest of funds it will give the plan double significance to the community.

It isn't exactly a compliment to call a woman a little goose. It might imply that she is no chicken.

ACME COMBINED HARROW and ORCHARD CULTIVATOR

JUST what you need to boost your profits. Cuts, crushes, levels, turns—all in one operation. Creates fine mulch to conserve moisture. Turns weeds under—exterminates them. Horses kept away from trees. Coulters do not cut deep enough to injure small feeder—roots. Adjustable depth of cut. Many other features.



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No. 8 Planet Jr Horse Hoe and Cultivator does more kinds of work better, quicker, and easier than any other cultivator. Indispensable on the up-to-date farm. Can be fitted with plow and disc attachment and all-steel wheel—new this year.



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Earliest and easiest worked. Carries off surplus water; admits air to the soil. Increases the value. Acres of swampy land reclaimed and made fertile. Jackson's Round Drain Tile meets every requirement. We also make Sewer Pipe, Red and Fire Brick, Chimney Tops, Encaustic Side Walk Tile, etc. Write for what you want and prices. JOHN H. JACKSON, 90 Third Ave., Albany, N.Y.

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In a favorable season crops will make enormous gains if they are given the available plant food necessary to support them. No soil contains enough available plant food for a bumper crop, or enough to prevent an unprofitable crop in a bad season. A good fertilizer increases the yield and the profit, but the plant food should be in forms available to the growing needs of the crop.

The A. A. C. Co.'s Fertilizers are manufactured from the best materials, and special factory treatment makes them highly available.

Wherever you live, we can reach you with the **right fertilizer,** the **right service** and the **right price.** Write today for a copy of "Plant Food," a practical hand book on fertility. No advertising in it; sent without cost, while this edition lasts.

Agents wanted in unoccupied territory. Liberal terms and goods that sell. It pays to sell our fertilizers as well as use them. Ask for agency proposition.

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Makers of brands with fifty years of quality and results behind them.

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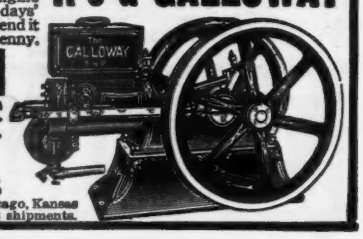


What Size Engine Do You Want?

1¼ to 15 h. p.—it's all the same to me. I've got a *New 1913 Model* in all sizes that fairly eats up work on the farm. Runs the biggest job at a cost of a penny or two for gasoline—has no complicated parts—can be operated by a boy—more substantially built, reliable, durable—and with all its superiorities sells at a price of *$50 to $300 lower* than old-style engines.

Write your name on a postal and I'll mail you my new engine book and revised price list. Just pick out the engine you want. I'll ship it to you on 30, 60 or 90 days' FREE trial. Then, if you don't want engine, send it back to me. The trial will not have cost you a penny.

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is worth looking into, especially when it's on best quality, New 1913 Model farm engine—permanently guaranteed. Ask for book which tells all. Also Special 1913 Proposition and Prices.

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MALONEY BROS. & WELLS CO., 43 Main St., Dansville, N.Y., Dansville's Pioneer Wholesale Nurseries.



The O. K. Cog Gear Barrel Spray Pump

The special features are the cog gear, malleable iron adjustable base for end of barrel. It is built to withstand the destructive acids, lime and other spray materials which cause the ordinary sprayers to fail in the fight. It has a patent brass cylinder plunger and ball valves, making it almost indestructible. The handle is wrought steel with cog gear, to enable the operator to maintain a pressure of 200 lbs. or more, if necessary, with very little effort. It can be attached in a few minutes to any barrel. The O. K. Spray Pump is one of the most formidable weapons in the warfare against all insects and pests of every kind.

Price, as illustrated, without barrel, including two 15-ft. lengths of hose, two stop cocks and two nozzles, complete, ready to use..... $17.00

Address GREEN'S NURSERY COMPANY, Service Department, ROCHESTER, N. Y.

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"SINCE 1889" *should convince you that the policies of our house are sound and the quality of our goods correct.*

When we say we produce the BEST spraying materials that can be manufactured we mean it, and this statement places us on record so that we have got to back it up with the best spraying materials in order to hold your patronage.

The days of flamboyant advertising and printed matter cleverly designed to misrepresent the facts and deceive, have gone by. No longer can irresponsible concerns with poorly manufactured goods expect to live on the exacting, critical and well posted consumers of to-day.

In support of our statements and claims we submit the following facts for your consideration:

For over 24 years we have manufactured nothing but "LION BRAND" spraying materials.

We are the only concern devoted exclusively to manufacturing a complete line of spraying materials.

We were the originators and pioneers in manufacturing every spraying material which we list, and which has recognized worth on the market to-day.

While others were still experimenting we were already selling perfected insecticides and fungicides.

The only way for you to know which are the best is to use

Blanchard's "Lion Brand"

Insecticides and Fungicides

They have been the Standard for more years than any other manufacturer in this line has been in business.

"LION BRAND" Arsenate of Lead	"LION BRAND" Grafting Wax
"LION BRAND" Pure Paris Green	"LION BRAND" Sticky Binding
"LION BRAND" Lime-Sulphur Solution	"LION BRAND" Weedicide
"LION BRAND" Bordeaux Mixture	"LION BRAND" Powdered Tobacco
"LION BRAND" Kerosene Emulsion	"LION BRAND" Insect Powder
"LION BRAND" Whale Oil Soap	"LION BRAND" Cattle Content
"LION BRAND" Pure Powdered Hellebore	And a number of Specialties

WE MAKE A SPRAY TO DESTROY EVERY INSECT ENEMY AND FUNGUS DISEASE OF TREES, VINES, SHRUBS, PLANTS and VEGETABLES

Insects and fungus diseases have become so numerous, so destructive, persistent and aggressive that it is impossible for fruit growers and vegetable gardeners to get crops that can be profitably sold without using Insecticides and Fungicides, and those who grow profitable crops do use them, and know it is plain common sense, and a most economical safeguard to do so.

The great thing in a successful fight against insect enemies is to **destroy the first hatching of the season**, because they quickly breed by the millions. If they get the start your work is so much the harder. You cannot afford to take chances on Insecticides you know nothing about—you must have "LION BRAND" that are always pure, fresh and certain in results.

We want every fruit grower, every vegetable grower, every one who has valuable shade trees and shrubbery to have a copy of our

FREE SPRAYING BOOKLET wherein we explain why and how spraying insures larger crops and better quality. Just send your name and address to our nearest office.

Blanchard's Products are sold by dealers and agents everywhere, or direct, if your dealer cannot supply them. Look for the Lion Brand Trade Mark and take no other.

The JAMES A. BLANCHARD CO.
568 Hudson Terminal, New York
569 Broad Street, St. Joseph, Mich.
Factories: New York and St. Joseph

Thirteen Killed by Mistake.

Thirteen persons have been killed in hunting accidents in Maine so far this season. Frank Dyer, a 13-year-old boy, shot and killed his father, Levi Dyer, at Lakeview Plantation, while deer hunting. The boy saw something moving in the bushes and fired, the bullet hitting his father in the head. Dyer was a farmer 50 years old.

Railroad Forestry.

A number of years ago the far-seeing managers of several great railway lines perceived the necessity of preparing for a shortage in crossties and construction material, and began the work of growing their own timber. In the last ten years more than four and a half million trees have been planted by the Pennsylvania railroad. Last year alone 515,703 trees were transferred from the company's nursery at Morrisville, Pa., to permanent places on the railroad property. Recently this railroad has begun logging operations, by conservative forestry methods, on several tracts. The work begun in 1911 involved about 1,500 acres, from which it is expected to cut 750,000 feet of lumber.

Newest Notes of Science.

Nearly 26,000,000 telephone connections are made in the United States every day.

The production of rattan in the Philippines is being fostered by the government.

The world's youngest licensed aeroplane pilot is a 14-year-old English naval cadet.

Muskogee, Okla., boasts an incubator in which 60,000 eggs can be hatched at one time.

The total number of cattle on farms in the United States has decreased 20 per cent. in the last five years.

Plans are being made for an aeroplane flight from London to Karachi, India, a distance of about 4,500 miles.

Motion pictures of American scenes, exhibited in Belgrade, have led to a demand for wearing apparel following American styles.

Three German chemists claim to have manufactured cow's milk synthetically.

Rubbing with a raw cut potato will remove most mud stains from dark garments.

A gyroscope to prevent a bicycle falling as it is being ridden is an English novelty.

Sterilization of drinking water with ultra-violet rays avoids the flat taste of boiled water.

Traces of the sediment carried out by the Amazon River can be detected 100 miles at sea.

Vienna streets on which electric cars run are cleared of snow by hauling plows that resemble American road scrapers behind plow-equipped cars.

A school for the instruction of native mechanics employed on the national railways will be estaolished by the Chilean government.

An extremely simple coin-in-the-slot stamp vending machine that takes up but little room has been patented by a Michigan inventor.

Only filtered air is permitted to enter a great German electric power plant, elaborate cloth screens guarding the machinery from dust.

An orchard heating plant that has been patented by a Massachusetts man employs a system of pipes to convey fuel oil from a central tank.

By the addition of small amounts of molyodenum and chromium, a German chemist claims to have produced an acid-proof iron alloy.

"Speak a little louder; I don't catch what you say," Blobbs persisted.

A low ripple of laughter went around the table.

The host, his face crimson with embarrassment, raised his voice still higher.

The poor old man did his best to hear, but failed. "What did you say?" he demanded irascibly.

The host cast an angry glance at him. "Hang it, man," he shouted, "I'm saying grace!"—Ladies' Home Journal.

The Greatest Thing.

"The greatest thing a human soul ever does in the world is to see something and tell what it saw in a plain way. Hundreds of people can talk for one who can think, but thousands can think for one who can see. To see clearly is poetry, prophecy and religion all in one."—John Ruskin in Modern Painters.

Bent Tree Hurls Worker to Death.

Like a snared rabbit swung at the top of a sapling. Steve Feineisen, 45 years old, was whirled to death at the Stambaugh farm yesterday.

The man was one of a gang planting trees, and held down the top of a tree while the roots were being lowered into the hole. The signal was given for him to let go, but he did not understand, and the tree sprung upright, throwing him clear over the top. He died in a few minutes.



200,000 Cherry
250,000 Apple
250,000 Peach
TREES

Grown by Men of Experience in the Greatest Tree Growing Center of the U. S.

We ship only quality trees and burn those we believe will not please our customers. We do not grow the quantity of trees that some nurserymen do, but we do maintain quality and have built our reputation by so doing.

For 48 years these nurseries have been known for reliability. We'd rather not sell a planter if we can't please him.

We guarantee our trees true to name and free from scale, and will refund $3 to $1 invested in every case where found otherwise.

Write for Catalog and Price-List of Selected Stock. Special Allowance on large Orders before March 1st.

J. B. MOREY NURSERIES
17 State St. DANSVILLE, N. Y.

MOREY'S TREES



LIVINGSTON'S "TRUE BLUE" SEEDS

Help to make better gardens. They reward planter's efforts with tasty vegetables and charming flowers. Work in the garden becomes a pleasure through results obtained with our selected strains.

5 FINE VEGETABLES 10c

Their qualities are proven every year in our gardens. Beet, Corn, Lettuce, Radish, Melon, large packets of superb sorts, prepaid.

Seeds and Results

Our Superb Large **Catalog Free**

Delivered at your door

Contains 130 pages, 300 pictures from photographs, colored plate and many helpful cultural directions. Offers quality seeds at fair prices.

Write for your free copy today.

THE LIVINGSTON SEED CO.
144 High St., Columbus, Ohio

SEED Fancy grade. Get our prices on Clovers, Timothy and other Grasses. Seed Corn, Oats, Wheat, Barley, Potatoes, Garden and Flower Seeds. Freight paid. Our illustrated catalogue of wonderful bargains is bigger and better than ever. Packet Flower Seeds free with every catalogue.

E. W. MARTZ SEED CO., GRUNDY CENTER, IOWA

CANTALOUPE SEED

I grow special strains for special needs. Let me help you to the best crop of melons in your neighborhood. I grow what I sell so know what I sell. Satisfaction guaranteed.

VALUABLE BOOKLET FREE.

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Farmer or Farmer's Son

with rig in every County to introduce and sell Family and Veterinary Remedies, Extracts and Spices. Fine pay. One man made $90 one week. We mean business and want a man in your County. Write us.

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ELECTRIC Steel Wheel Handy Wagons Are Big Money SAVERS!

No more high lifting or pitching. Saves you work and lightens draft nearly 50%. Don't rut fields or roads. We also furnish Electric Steel Wheels to fit ANY wagon. Wheels can't dry out or rot. Send for free book of facts and proofs.

Electric Wheel Co., 24 Elm Street, Quincy, Ill.



Strawberry Plants, 33 Vigor productive varieties. Save money, ask for our valuable illustrated Catalog of strawberry, grapes, currents, raspberry.

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STRAWBERRY PLANTS

Guaranteed as good as grows at $1.00 per 1000 and up. *Catalog FREE.*

ALLEN BROS. Paw Paw, Mich.

A FARMER'S GARDEN

IS without real serious meaning to many thousand farmers because they think it is too hard work or it is not convenient to work a horse. So many farmers fail to understand what truly wonderful possibilities there are in modern hand tools



IRON AGE Wheel Hoes and Drills

do all of the sowing, hoeing, cultivating, weeding, furrowing, ridging, etc., in any garden, with better results, far less work and some real pleasure for the operator. $8 or more combinations at $6 to $12.00. Ask your dealer about them and write us for new booklet, "Gardening with Modern Tools" also copy of our paper "Iron Age Farm and Garden News"—both are free.

BATEMAN M'F'G CO.
Box 1602 Grenloch, N. J.

CLASSIFIED ADVERTISEMENTS

No display advertising will be placed in this department and no type larger than 6-point. The first three words only to be printed in capital letters. Each abbreviationand number will count as one word. **Rate 10 cents per word** for each insertion. No advertisement inserted for less than $1 per issue. We cannot afford to do any book-keeping at this rate. Cash must accompany every order. Orders must reach us not later than the 15th of the month previous to the month in which the advertisement is to appear.

Terms: CASH WITH ORDER.

Green's Fruit Grower Co., Rochester, N. Y.

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MISCELLANEOUS

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Praises Walking.

In the brisk fall weather, walking is a delight. The pity is that so many do not appreciate the joy of it. Walking has always been one of the real resources of humanity, but at present the mental attitude of the general public is such as to discourage it. The feeling is that he who goes afoot has somehow failed in life. Had he succeeded, he would be whisked through space by an automobile, but, as he is walking, he must be at best a well-meaning failure. Such is the attitude which has cut off one of the splendid common delights of man. This should not be. This must not be. The fall is the time when the obsessions of high life should be cast aside and the pleasure of putting one foot before the other should be again realized.—Boston "Advertiser."

L. W. Chandler, owner of the Black Rock orchard at Coeur D'Alene, Idaho, has received an order for one full car of Wealthy apples to be shipped to South Africa and the shipment will be on the way next week to be loaded on steamer at Seattle.

Cost of War.—More money is spent in keeping up armies and navies by the great powers than in promoting the pacific interests of civilization. But the lavish expenditure of money in the cause of militarism is less tragic than the appalling waste of human life. Othello speaks of the "pomp, pride, and circumstance of glorious war," but as Carl Schurz, who fought in our Civil war, said, referring to his experiences at Gettysburg, those who view war as "a mere heroic sport" would "hardly find it in their hearts to do so had they witnessed scenes like these and thought of the untold miseries connected with them that were spread over the land." And he adds: "He must be an inhuman brute or a slave of wild unscrupulous ambition who, having seen the horrors of war, will not admit that war brought on without the most absolute necessity is the greatest and most unpardonable of crimes."

"What is the real difference between mushrooms and toadstools?" "One is a feast, and the other a funeral."—Baltimore "American."

New Jerseyite Grows Pineapple.—A home-grown pineapple will adorn Morris B. Allen's table Sunday. He planted the fruit in his garden six years ago. It is said to be the first pineapple ever grown so far north.

The Man Who Sings at His Work, Succeeds.

Give us, oh, give us, the man who sings at his work! He will do more in the same time—he will do it better—he will persevere longer.

One is scarcely sensible of fatigue whilst he marches to music. The very stars are said to make harmony as they revolve in their spheres.

Wondrous is the strength of cheerfulness; altogether past calculation its powers of endurance. Efforts to be permanently useful must be uniformly joyous—a spirit all sunshine, graceful from very gladness, beautiful because bright.

—Thomas Carlyle.

The Rowan Tree.

Can anybody remember a more brilliant display of scarlet berries on the mountain ash, as the rowan, which really belongs to the pear tribe, is absurdly misnamed? No tree so combines beauty with utility as this favorite denizen of suburban shrubberies. The wood is "all heart;" many men and most birds eat the coral fruit, which furnishes the best jelly for eating with venison, and from which the Welsh still brew a species of cider that John Evelyn considered "an imcomparable drink." The tree itself is a certain specific against witchcraft and evil spirits, which is why the rowan is so frequently found growing in west country churchyards. Suffragettes when they pursue poor Mr. Asquith should provide themselves with bough of mountain ash, from which the Amazons made their spear shafts.—London "Chronical."

"Hov yez anny ancistors, Mrs. Kelly?" asked Mrs. O'Brien.

"And phwat's ancistors?"

"People ye sphring from."

"Mrs. O'Brien, listen to me," said Mrs. Kelley impressively. "Oi come from th' rale sthock of Donaghans that sphring from nobody—they sphring at them."—Ladies' Home Journal.

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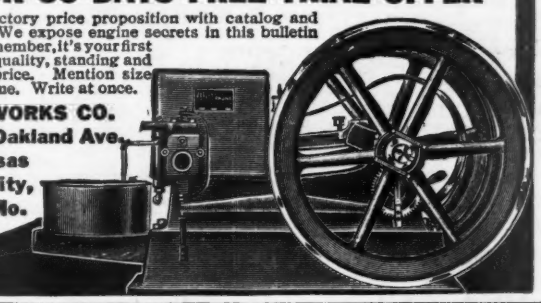
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Just figure it out in comparison with other washers—Heavy driving wheel that furnishes the power. Most manufacturers use a light wheel because it is cheaper. Lid construction that enables you to open the machine and look at the clothes without stopping the machine. No heavy weights or machinery to lift. Gears protected by guards. All parts easily oiled. Metal parts in silver grit. Tub and all wood parts in natural finish and an ornament to any home.

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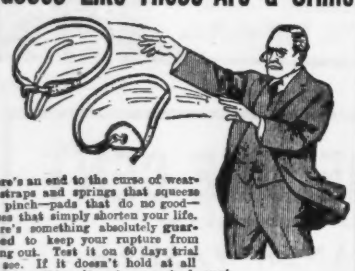
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Popular Fruit Growing

By SAMUEL B. GREEN, B. S. Hort., For.

Professor of Horticulture and Forestry in the University of Minnesota

This book covers the subject of Fruit Culture in a most thorough and practical manner. The great growth and wide specializing in fruit growing has led to the increase of troublesome pests. This subject is explained so carefully that a painstaking grower can quickly recognize the presence of these pests in their formation and check their injuries by applying the methods of extermination so minutely described in the chapters "Insects Injurious to Fruits."

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HEALTH DEPT.

Medical Notes.

Swellings caused by neuralgia or toothache can be very quickly reduced by applying scalded beet leaves as hot as can be borne. This is very soothing in case of neuralgic pains.

When hops are scarce, peach leaves make a good substitute in yeast making.

Spearmint will relieve vomiting, and the root of sweet flag, or calamus, will check diarrhoea.

The moss growing on the trunks of maple trees, boiled and sweetened, makes an excellent cough syrup.

A cupful of hot hop tea will often break up a severe cold.

A crust of stale bread soaked in vinegar and bound on the temples will relieve headache.

Scalded horseradish leaves bound on the wrists often cures toothache.

As the general health of the family depends very largely upon the food, it is very important that the housewife know the value of each kind of food in different diseases, as well as in health. The following notes should be helpful in this regard: Celery for rheumatism and nervousness. Lettuce for sleeplessness. Watercress for scurvy. Peanuts for indigestion. (They should be salted.) Salt to prevent bleeding at the lungs. Onions are almost the best nerve medicine known; they are also fine for liver troubles, for coughs and colds. Asparagus will bring about perspiration. Carrots for asthma. Turnips for nervous troubles; also for scurvy. Raw beef for frail constitutions; also for consumption. It should be chopped fine, seasoned with salt and heated by placing it in a dish of hot water. Rice for diarrhoea. Cream for consumption. Eggs, especially the yolks, for jaundice. Beaten up raw with sugar, they clear and strengthen the voice. Buttermilk is good for Bright's disease.

Drink Buttermilk.

Even when sourest, if it is still in good condition, butter milk is a valuable medicinal agent. A refreshing acid, it is always nourishing without being insipid, says the Delineator.

The lactic acid which it contains attacks and dissolves every kind of starchy deposits in the blood vessels; keeps the veins and arteries supple and free from matter which might otherwise clog them, and destroys the irritating calcareous deposits that may gather around the joints, as well as any poisonous waste in the muscles. It is not only beneficial to the digestion, but also for tuberculosis and all other pulmonary complaints. It is also a harmless substitute for intoxicants.

Drinking buttermilk freely—two quarts daily would not be too much—is said to preserve the complexion of youth, and as gouty difficulties generally arise from sluggish excretion it is a blessing to all who suffer from such complaints.

Buttermilk not only tones the stomach, but furnishes material from which healthy blood may easily be made. It is also easy of assimilation, and, in cases where sweet milk would prove objectionable from a medicinal point of view, it may safely be given with every assurance of beneficial effect.

Notes on Health.

Eminent physicians say that the best medicines in the world are rest, warmth, pure air, pure water and cleanliness. And the greatest of these is rest—and cleanliness is not the least, though last named.

When pain or disease assails the system of the dumb brute, it crawls away from its fellows to effect the "rest cure." Man the human animal, is less wise and considers it a virtue to brave or defy disease as long as a foot can move or a finger wriggle.

When the system is run down by overwork or long continued exertion, the time is ripe and the field fertile for many unpleasant ailments, such as colds, etc., to gain a foothold, if not for absolute disease to enter the system. The idea of lying down for rest in daytime seems impracticable to the busy housewife and even though she may occasionally in the too frequent unventilated living room instead of in a cool room with fresh air.

It is not the amount of food one devours, but the amount he digests, which keeps him alive. Only a small portion of the great mass we eat every day is sufficient for our nourishment. That it's best to eat sparingly and lightly, better to come away from a meal hungry than gorged, and better to eat too little rather than too much, are hard lessons to learn, but they are worth learning if one prizes good health. —Ranch and Range.

Old Fashioned Remedies.

For breaking up a cold there is nothing better than hot lemonade taken upon retiring. This is made by putting the juice of two lemons in a pint of hot water. Boil one minute. Sweeten to taste and drink as hot as possible.

Old-fashioned onion syrup, which is especially good for hoarseness and sore throat, is made of minced onions, a tablespoonful of cider vinegar and half a cupful of boiling molasses.

The fumes of burnt camphor will instantly relieve cold in head. Put a piece of camphor the size of an egg in an old saucer. Set it on fire, and, after burning a few moments, blow out the flame and inhale the fumes.

To make boneset tea take one tablespoonful of boneset and put in a pint of hot water, letting it draw for fifteen minutes. Sweeten with molasses. When cold take two tablespoonfuls every half hour. This old-fashioned herb may be obtained at any drug store.

Drinking Water at Meals.

There are always two sides to the simplest little fact of life, says Ohio State Journal. There is this matter of drinking water at one's meals. It has been regarded as a miserable habit. It used to be taught—drink at your meals, if you feel like it; drink all you want; it is good for you; helps digestion. Then came the opposite doctrine, never drink at your meals, and not for an hour afterward.

Now comes Prof. Hawk of the University of Illinois, who has been studying the subject for seven years, and his conclusion is that water-drinking at meals helps digestion principally by utilizing the protein food, which is regarded as the most important function of digestion. Then, fluids help digest the fats and throttle the bacteria that range along the alimentary canal and keep stirring up all sorts of tumults. So the latest information is not to let anybody scare you about drinking water at your meals. Just drink what you want and forget about it.

Care of the Teeth.

In order to have good, strong teeth, resistant to decay, one must eat hard and coarse foods, says a bulletin on the care of the mouth and teeth, issued to students and the University of Wisconsin. Teeth and gums need exercise as much as any other part of the body. Before the days of fine breakfast foods, meat extracts, finely bolted flour, and other mastication-saving devices, people were obliged to chew their food very thoroughly before it could be swallowed. This mastication served the twofold purpose of thoroughly grinding the food and also exercising the teeth and gums. The teeth, through exercise, were well formed and strengthened, the gums were hardened, and it was easy to preserve the teeth with very little care. A very usual case of tooth decay is the habit of taking very hot food or drink. The enamel of the teeth expands with the heat, and contracts on cold air being breathed directly afterward, and, if this goes on regularly, cracks appear, which are followed by the inner structure of the tooth crumbling away. Acids which form in the mouth by decomposition of food are always a source of danger, and their action on the enamel of the teeth must be as far as possible counteracted by brushing the teeth at least night and morning, if it be not possible to do so after every meal. Acids, such as vinegar and pickles, are more dangerous still, and if they are used persistently will destroy the teeth.

The Welsh rabbit, unlike its timid namesake, does its most desperate fighting after it is down.

Gasoline Cleaning.

First run threads of some contrasting color around all spots on the garment to be cleaned—this in order to give the spots special attention. Pour boiling water into a tub, and in this set a small tub or dishpan, the size depending upon the size of the article you intend to clean. Pour gasoline into the smaller vessel and cover the whole with a heavy cloth for about a minute, in order to give the gasoline a chance to heat. Then put in your goods to be cleaned and work it up and down, giving special attention to where the threads appear, as you will not be able to see the spots. When clean, wring and shake where there is plenty of air, to get all the gasoline possible out before hanging it on the line to air. Hang coats and waists on a coat hanger and pin skirts on the line along the belt so as to keep their shape.



The apples show up well in this Wisconsin apple tree and the tree gives evidence of good pruning and good culture. It does not look as though there would be many cull apples on this tree.

Notes From Denver Field and Farm.

Supplies.—The field equipment of an orchard is not complete without supplying ladders, lug boxes, buckets and a low down wagon with platform bed and bolster springs. Have a top nailed around the edge of the bed to prevent the boxes from sliding off when on a grade. The lug boxes should hold a little more than a packing box, have a heavy cleat nailed across the top at each end, to prevent the top box from crushing the fruit in the lower when stacked, and have good hand holds sawed through the ends. As to ladders, the common step ladder variety is never satisfactory. There are some excellent types of fruit ladders, but most growers prefer the three legged kind. The front leg is loose so that it may be adjusted and have it light enough to pack around conveniently. Good box material is very important. Nothing will detract from the sales of a consignment of fruit more than cheap packages. Along with the other material comes lining paper, wrapping paper and layer paper.

No Surplus Apples.—No one who seriously considers the subject believes that the United States will have more apples this year than the people of this country can consume. Suppose the crop amounts to 45,000,000 barrels—it would be only a bushel and a half per capita, even if not a single apple were exported. Certainly this is a small quantity for our people to consume and much greater quantities of apples have been used in this country, time and again. Now, what's wrong? First, we are getting away from the apple eating habit. It is hard to make this confession, but we believe that the consumption of oranges and bananas has undoubtedly lessened the demand for apples. Then too, apples have been too high from the standpoint of the consumer. No matter what the owner gets for his fruit, the price is always high when the apples get to the consumer and this stickup has undoubtedly shut off consumption. Not too many good apples are grown, nor are there likely to be for some time to come, but too many inferior apples are put up every season. If good apples could be put into the hands of consumers at reasonable prices, the consumption could be multiplied many times. We are a nation of apple-eaters but the quality of the fruit and the price must be right. The question is, what are the growers going to do about it? The solution of the problem is largely in their hands.

Wealthy Apple.—The popularity of the Wealthy apple is increasing by leaps and bounds because it is the best looking cooking apple on the market today. The variety has been so much in demand in the nurseries of certain sections of the north that its price in quantities has been at a large premium over other varieties and as a consequence our Colorado people have not been planting them very liberally of later years. As a dessert fruit at its best estate it does very well but of course can not touch one side of the Jonathan which is the most popular variety grown in Colorado. The Wealthy is a reliable fruit to hold in storage so that its season may be prolonged several months. Unlike old Ben Davis, its quality will entice the consumer to buy more and come again, but we will never pay much attention to it so long as we have the half dozen better things we are now growing as our standard fruit. Peter Gideon did a great service to the northland when he invented the Wealthy and it may in time become valuable here for planting high up in the altitudes.

The orchard men who make a business of spraying invariably are prosperous at harvest time. They have a right to be, for they are harvesting first quality fruit, while the neighbor, who did not give his trees proper care, is picking up culls and grumbling about an off year. Good word is coming from every grower who insured his crop against the ravages of insects by intelligent spraying. They will net a good profit from their orchard area. By similar methods they will do the same thing next year, and the next, and the next. Their harvests will run from eighty-five to ninety-five per cent. sound fruit, while some unsprayed orchards show crops that will do well if they run five per cent. sound.

Time to Pick.—The time for picking red apples is commonly gauged by the color of the skin and that of yellow apples by the color of the seeds. The latter is the only reliable test of ripeness, for an apple picked just as the seeds are turned light brown and before they become dark around the edges will have not only full flavor, but the best keeping quality. But red apples are often left for some time after the seeds indicate maturity to allow them to put on more color, which they do rapidly under the influence of the bright days and cool nights of our Colorado climate. Growers should bear in mind, however, that to defer picking after the seeds indicate ripeness shortens the life of the fruit in storage, often to a serious extent with the mid-winter varieties.

Did the Bird Understand?

Editor of Green's Fruit Grower:—While plowing my small orchard the past summer there was a great flutter of Mrs. Kildee to inform me I was nearing her nest of four eggs so neatly arranged that no improvement could be made. Did you ever notice that this trim bird never alights on anything but the ground and builds her nest on the ground also. Well, I stopped and said as I came close to the bird: "Now, Mrs. Kildee, I am neither going to harm you or your neat nest, so go back to your duty." Here is where my wonderment was aroused. I was two rows from the nest I discovered as she made her way thither and set herself to the task of hatching her young. As I came nearer and along beside her, the cultivator coming within six inches of her, never a move did she make and although I plowed those trees again before four twin little birds welcomed me with their "kildee," the mother paid no more attention to me than if I had never been in the field. While I know they have no power of reasoning to the extent that she fully comprehended my words. I was at a loss to explain her actions other than that a love for birds by always speaking kindly to them had won her confidence. A few days ago six Kildees came back after an absence of a few days and all seemed to say kildee in unison. Then away they flew. Did they return to tell me a kindly farewell before departing for their southern home? I took it that way, and said, "Goodbye, happy birds; come again."—Paris C. Johns, Indiana.

Protect the Quail in Winter.

Editor of Green's Fruit Grower:—It is well worth the while of the farmer and orchardist to look after the winter protection of this industrious friend of the farm.

Who is it that does not enjoy the gladsome and shrill "bob white," of the quail as they call together from field and glen their family or mate?

And who is it that does not pride himself in the fact that a covey of these birds inhabit your grassy meadow or thicket, where secluded from intruders they hold forth in the nearby pastures and grain fields in search of the intrusive bug and worm?

And who is it that has not been suddenly thrilled by the "whir'r" of this handsome and useful bird that is not willing to give it freedom of range upon his domain?

Huntsman, lift not thy wicked firing piece against this handsome feathered friend of the farmer and his home! How wicked and inconsistent thou art! This beautiful, innocent knight of the thicket enjoys life as well as you. Disturb not its peace of home and companionship.

Then the farmer should heed the welfare of this feathered friend, the quail. The busy old hen mother with her mate, ever alert for danger, with their brood roaming about in the broad fields fare very well during the summer season, but during the rigors of our long, cold, snowy ice clad winters cause these jolly friends to suffer untold discomforts and hunger.

In our cleared up regions where we so much need these covies of birds much of the native shelters are gone.

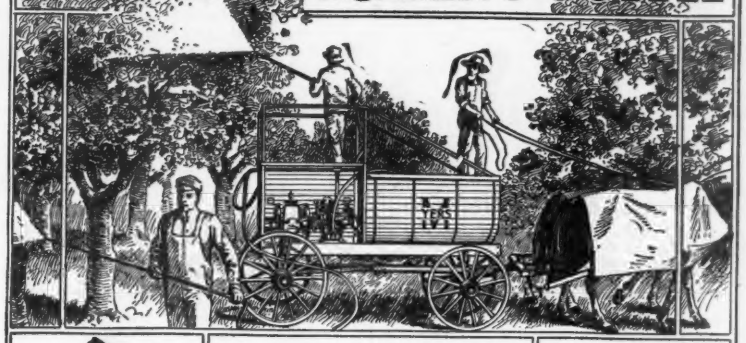
Thickets are cleared into tillable fields, friendly rail fences are replaced by straight woven structures affording no shelter, and upon our average tillable farms there is but little protection for the flock.

In consequence the quail is fast disappearing not only at the hand of the wicked "pot hunter," but as well, due to the tidy agriculturist whose sole ambition is to keep all undergrowth, tall swail grass, and other native rendezvous in subjection, fence corners and fields trimmed neatly, thus affording these birds little or no winter protection. If there be a covey of these valuable birds in your section of country, whether upon your own domain or some farm distant it is well worth your while to aid in their protection. Signs upon all corners of your farms warning the intrusive hunter affords them protection for they soon learn that they are not molested when upon your territory and will stay about your fields.

Then as cold winter comes upon us it is well worth the while to haul a load of brush from the orchard or wood lot and pile a few about the fields along the fences in such manner that they will form a support to bunches of straw, corn stock or other coarse litter which will afford the birds shelter beneath when snow and ice cover the ground.

Then do not forget when old "boreas" is upon us in its fierceness to take a few extra handfuls of small grain, cracked corn or crumbs from the table and scatter it beneath these shelters. You can serve many a welcome meal to these birds, and in the future prosper greater.—Geo. W. Brown.

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The January, 1913 "Brim Full" Number.

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Advice About Apple Growing and Selling.

By Waldo G. Paine.

No doubt you who are engaged in the fruit business have had the doubtful pleasure of listening to a great many statements containing panaceas for the ills of the apple industry. Some have been of value, others have not. But all have their indetermonate effect in arousing public interest in the vital questions that now confront us.

I take it we are all agreed that perfection has not been attained in the apple business. That is as it should be, for once we allow ourselves to drift into that easy state of entire satisfaction, just that moment will we start going backwards. For in this age of changing conditions and methods there is no middle ground, no standing still—relatively speaking. The minute we stand still, that minute we fall behind, for the others will be forging ahead.

But I do not wish to be misunderstood in my position—I am not an alarmist. I am merely seeking light in the solving of certain vexing problems. I am as firmly convinced of the substantial and wholesome future of the apple business as I am convinced of the present favorable status of the wheat business. There is nothing inherently wrong with the apple industry; there are merely a few problems of more or less intricacy which must be solved, and which surely will be solved, before the industry will go ahead to the extent it deserves.

Out of the mass of things written and spoken on the problems of the industry, two things stand out pre-eminently important. These are:

First—Necessity for co-operation on a large scale in marketing.

Second—Imperative action is demanded to eliminate waste of poorer gardes of fruit.

Each of these has wonderful possibilities. Together they embrace the minor problems of the industry. Their solution demands the immediate and intelligent consideration and determined action of the best minds in the Pacific Northwest.

Before going into a discussion of these problems, let me depart from the ordinary, natural sequence of things by telling you what effect their successful solution will have. I am satisfied it will give the apple its proper and rightful place as the world's fruit. Think what that means to this northwestern country of ours, but don't let the magnitude of it cause you to hesitate or to fear the goal is too distant, the way too hard.

The establishment of the apple as the world's fruit means much to every one of us. It means, first, the bringing of untold wealth in return for a product that will be in demand in all the civilized countries of the world. Money brought thus from distant quarters is what certain people of speculative tendencies might term "velvet." By whatever name you choose to designate it, however, it spells increased prosperity. It is the very essence of good business, this matter of producing something which the world demands constantly and which cannot be supplied in such quantities as needed. The ramifications of the benefit derived are too numerous, and I shall not dwell on these.

There is no question that the apple is eminently qualified to take its place as the world's fruit. The fact that it can be eaten just as it comes from the trees and can be cooked in so many appetizing ways gives it a decided advantage. And it is no nostrum to hold that the apple has truly wonderful health-giving qualities.

Occasionally someone bobs up and cries loudly about danger of over-production. There were one-fourth less bearing apple trees in 1910 than in 1900, 151,323,000 in 1910 as compared with 201,794,000 in 1900. But the decrease is not so bad when you consider that there were nearly 66,000,000 trees not in bearing when the census was taken. Many of these will never reach bearing age. The old trees are dying fast, the mortality in ten years being about 25 per cent. So, in spite of the heavy planting we are not holding our own in production, considering the increase in population and the greatly increased and more nearly universal demand.

But before the apple can gain the recognition which comes only from universal use it must be placed in the hands of the consumer at a price within reach. This is not a question of selling a few thousand carloads of fancy apples at equally prices. It demands the producing and selling of vast numbers of carloads at prices within reach of all. Now we come directly within the field of the first problem I mentioned a few moments ago, the necessity of cooperation on a large scale in the marketing of the crop.

In this country of ours we have the soil and the conditions necessary to raise apples of the finest quality in every particular. But without an effective means of getting them to the people who demand them, they are in the same position as diamonds on an uninhabited desert isle. The diamonds, to have economic value, must be taken to some place where there is a demand for them.



Northwestern Greening—Unfortunately the friend who sends us these photographs does not state what varieties are represented. I suspect from the size and shape of the above apples that they are the Northwestern Greening, a very hardy and productive variety of apple somewhat resembling the Rhode Island Greening. This is a popular variety where hardiness is desired.

Habits of Salmon.

Publishers of Country Life in America,

Gentlemen:—In your last issue I read with interest the article on Salmon, in which it is intimated that these fish, coming from the sea to our rivers to spawn, continue existence after spawning and depart for the sea.

It has been my impression that the salmon perishes after this migration to fresh water and after spawning, While at De Land, Florida, last winter, I made this statement in the presence of a naturalist connected with a department of the United States Government at Washington and a group of other men. The United States official was appealed to decide the question as to whether I was right in my assertion that the salmon perished soon after spawning in our rivers, and he decided that I was correct in my statement.

I am anxious to be further informed, therefore, will you have the kindness to mail this letter to the writer of the article I refer to and inform me regarding his reply?

In American cyclopedia in Vol. 13, I find that all the Pacific Ocean salmon die on or near their spawning grounds, and never go back to the ocean.—C. A. Green.

Mr. Chas. A. Green:—Your letter of June 12, which you sent to Doubleday, Page & Co. asking about the habits and life history of salmon is before me. It came while I was away in Illinois, and since my return home I have had distractions in the shape of three of my family sick at the same time, not seriously sick but just sick enough to make me worry and cause neglect of correspondence. It is accepted now as a fact that the Pacific salmon of our Northwest (Washington, Oregon, British Columbia and Alaska) do all die after spawning. Two facts prove this—one that thousands are found dead in the upper waters of the rivers and the other that no mature salmon are ever caught dropping down to the sea. With the Atlantic salmon (salmo salar) they are not found dead in the upper waters, and they are caught as they are returning to the sea. They are emaciated, and are salled "slinks." Your United States scientist was only partly informed, or else he spoke of the Pacific salmon only. I never before had anyone suggest that the Atlantic salmon perished after spawning. Never a word of it from guides who fished salmon all their lives, in New Brunswick, Nova Scotia and Newfoundland.

Extract from Geo Shiras article in the Natural Geographic Magazine, page 472, May, 1912: "That death should be the penalty of parentage for all the salmon of the Pacific is generally regarded as one of nature's mysteries, and deepened by the safe return of the North Altantic salmon to the sea."

Another article in the same magazine by H. M. Smith on America's Most Valuable Fishes is worth reading. I thank you for your interest and your question. —H. K. Burrison.

Editor of Country Life:—About two weeks ago I wrote you that I was of the opinion that the salmon of the Pacific coast perished after coming into the rivers and after spawning. I called your attention to the fact that the author of the interesting article in your recent issue on salmon, Mr. H. K. Burrison, seemed to intimate in his article that this was not the case. At least he did not mention this fact.

You sent my letter to the author, and I think you will be glad to hear his reply which I enclose herewith.

It was the salmon of the Pacific coast that was under discusssion between myself and the United States Government official in a Florida hotel last winter, referred to in my letter to you, and not the salmon of the Atlantic coast.—C. A. Green.

Mr. Chas. A. Green:—I enclose herewith photographs taken in my orchard one mile from Appollo, Pa. The orchard contains 250 apple trees, 100 of which are Baldwins, the balance are of the following kinds: Rhode Island Greenings, York Imp., Northern Spy, Fall and Winter Rambo, with a few summer varieties for home use. This orchard was planted in the springs of 1890, 1894 and 1897.

No. 1, is Rhode Island Greenings of last planting; No. 2, two rows in a block of Baldwins, second planting; No. 3, Baldwins of first planting.—W. T. Gilkerson.

Note.—The photos are not clearly defined. —Editor.

It is to be regretted that people are often unable to distinguish between a friend and an acquaintance.

AUNT HANNA'S REPLIES

Friendship but not Love.

A man 45 years old is in love with a girl 38 years old, who is a professional nurse and is earning good money. These people have known each other for a long time. The girl has great respect for this man but has been disappointed in love and does not feel that she thinks enough of this new lover to warrant her marrying him. The lover naturally comes to Aunt Hanna for advice.

Aunt Hanna's Reply: It looks to me as though the nurse were worth waiting for and striving for. She is not one of those whose affections are easily transferred from one man to another. She is still faithful to her old love although he has proved unfaithful. My advice is that you have patience and wait, watching with eager eyes for some hopeful indication that the time is coming when the girl's friendship for you will be changed to love.

I believe that young people should be very frank with each other, therefore I advise you to tell the girl that you are willing to wait so long as there is any hope. If the girl tells you that there is no hope, that there is no possibility of her ever marrying you, I advise you then to give her up and seek a bride elsewhere. Do not get the idea that there is only one woman in the world who can make you happy.

The Unhappy Wife.

Dear Aunt Hanna: I read in the June Fruit Grower, the letter from "An Unhappy Wife," also your nice answer. But I think you put it very mild. A mean man of that sort needs no pity, and if she did not begin right, there is time now. I say knock him down if necessary, make him understand that she refuses to be abused, and don't be afraid of him, for any man that will abuse a woman is a brute and a coward. I have in mind a man, or an apology for one, in our neighborhood, who is married to a woman twenty years younger. He is a shiftless, good for nothing stick, sitting around smoking while his five children are hungry and almost naked. If his wife asks him to get some wood for the fire or to work some place to get the children food, he will threaten to leave her, when every one knows that it would be a blessing to them all if he would. He is a man of no principle at all, will lie, steal, and never keeps his word in any respect. I believe it is such men as he that keep so many good women from marrying. Not that you will find many men like him, but there are many men who are no credit to themselves or their Maker. While we speak of this class, we must not forget to render all honor to the men who are keeping happy homes today, where all is joy and peace and the wife and mother a choice possession.

Again, there are many homes ruined not by the man but by the woman. Some are slipshod, untidy housekeepers, and there are grosser faults. While we cannot reach them all, let us ever strive to set a good example and do what we can to help them to a better way.

I laughed at the letter from the poor chap the girl smiled upon or "at". Are smiles such a rare thing with this poor fellow that to encounter one makes him afraid? Cheer up, boy, smile yourself at every man, woman and child, in fact at everybody and everything, keep a smile on your face and a smile in your heart, and soon you will come to see that life is one "grand, sweet song."—Ardell.

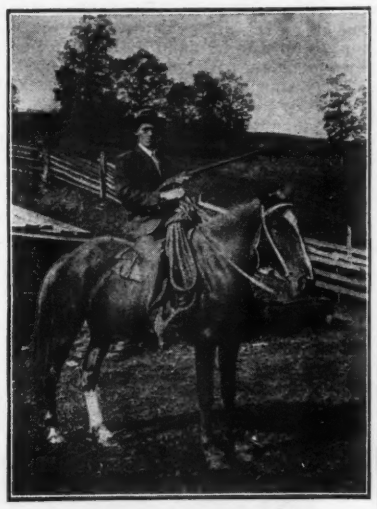
Marriage, Divorce, Etc.

My Friend and Benefactor Green:—I saw in the Fruit Grower an account of trading wives in England. What I am going to relate can be proved by living witnesses. I will know of two couples that changed and traded wives, all satisfactory, no fault found, all parties satisfied. One couple lives in Fairport. Now the fun of the thing is that when one of the wives got sick the other wife went and took care of wife No. 1, all satisfactory all around. I have been where they, the four, have visited together, no quarreling, no a thousand times no, and nobody stuck their noses in the affair.

Now my second story is about a young man that worked for me on my farm. He fell in love with a girl eleven years old. They eloped together. They got married and the people stuck their noses in the affair and had the groom arrested. The Court sentenced him to three years in prison. He served his time out and went back and looked up his young wife and they have lived happily together to this day. They live in Palmyra, N. Y. The above is true as there is a God in Israel. I am ready to go to or before a notary officer and swear that the above is true.

We are told in the Bible that marriage is honorable. Did the young man find it so when they put him in prison? We are told "Whom God has put together let no man put asunder." Are they not putting asunder? Marriage wherever God puts man and wife together is bondage. A priest would not allow a woman a divorce if the priest knew the husband would give the wife a disease that would be worse than hell itself.

I see you are in favor of co-operation. That is socialism pure and simple. The larger the business the cheaper it can be done. Socialism is an international affair. It's familair the world over. Life, liberty and free speech their code. We are entitled to life, lioerty and the pursuit of happiness. We need no King, no Morgans. We lived before the billionaires played their part and we will live after they are gone. No man or woman ever earned a million dollars honestly if they had $6.00 a day ever since Christ was born.—Seargant Skinner.



The above photograph is that of C. W. Adams, W. Va., and his three-year-old mare.

Kindness.

Editor of Green's Fruit Grower:—Kindness will wipe out a multitude of sins, anger, etc., but hate will produce strife and suffering. Kindness wins, but hate will lose. Kindness makes friends, but hate makes enemies. Kindness like a soft answer, turneth away wrath, but hate stirs up strife. Kindness wins animals, but hate drives them away. Kindness will bring the glow of health, but hate brings on worry, grief and finally sickness. Kindness is a garden of blooming flowers that has perpetual sunshine, but hate is a nest of vipers that will breed disaster, ruin and destruction. Kindness is a well-spring of refreshing beauty that never fades, but hate is a cesspool of foul and destructive pests. Kindness is the sunflower of a happy home, but hate is a mildew that covers all with sadness and sorrow. Kindness is a tree of ever blooming roses whose fragrance wins the admiration of all, while hate is a crooked tree, like the crab-apple, and its fruit sour like acid that corrodes and destroys. Kindness is a tree that bears lucious fruit, bringing the glow of health, but hate is a tree that bears discontent and makes all miserable who feast on its fruit. Kindness comes from eating the herb and fruit of the tree—Gen. 1:29. But hate comes from eating dead-flesh, eggs, tobacco, etc. Kindness comes from drinking water to quench thirst only—Gen. 2:10. But hate comes from drinking milk, cocoa, tea, coffee, wine, beer, liquor, etc. Kindness is the sunshine of love that thinketh no evil, but hate is the darkness of anger that has peace. Kindness makes harmony, but hate makes discord. Kindness is a fountain of bliss that waters life and home with never ending joy, but hate is like a sewer of corruption that breeds disease. Kindness unites, but hate divides. Kindness is a garden of ever-blooming roses, but hate is a place that has no beauty. Kindness has attractions that makes home a Heaven on earth, but hate has a den filled with foes and enemies that makes life miserable.—J. H. Neff, Cal.

Niagara County, N. Y., is justly famed as the leading peach growing county in the United States. It is estimated that 1,000,000 baskets have been shipped from the county this year. The principal varieties of peaches grown in the Niagara belt are the Triumph, Early Rivers, Yellow St. John, Early and Late Crawfords, Elbertas, Globes, Chair's Choice, Red Checked, Melicotons, Stevens' Rare Ripe, Plain Surprise, and Mammoth Crawfords.

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The CHATHAM Grain Grader and Cleaner

Now that farmers everywhere are cleaning and grading their Seed Grain, the question is, how to get it done *best, easiest* and cheapest. Here's my 1913 offer:

Send me one dollar and I will ship you, FREIGHT PAID BY MYSELF, this improved 1913 model Chatham Grain Grader and Cleaner with all equipment. Clean your Seed Wheat, Oats, Flax, Barley, Peas, Beans, Corn, Grass Seed, etc. Then PLANT those fine seed. AFTER you have harvested a bumper crop, pay me the balance of my low price. Not one penny need you pay, except the $1, until next November. And by November YOUR CHATHAM WILL HAVE MORE THAN PAID ITS ENTIRE COST in INCREASED CROPS. Then you'll have a "Chatham" to work FREE for you the rest of your life.

Your Dollar Returned

If you want it. I don't want your dollar or want you to keep my "Chatham" unless it pleases you. If, after a 30-day test, you are not satisfied, return the machine at my expense and I will send back the dollar.

A Machine That Fits Your Farm

After 40 years' experience, I know every grain and noxious weed grown in America. I know the section where each one grows. I know every grain and weed that grows on *your* farm. Experience has shown that a Grain Grader and Cleaner should have special equipment for the particular farming section to which it goes. For example, I send an *entirely different equipment of screens*, riddles and gangs to Maine from what I send to California. In fact, *there are scarcely 2 states in the U. S.* to which *I send the same equipment*. Thus you get the exact and proper outfit to handle the grains and weed seed that grow on *your* farm. You *don't* have to pay for a lot of extras for which you have no use.

Extra Screens and Riddles Free

In case you want more or different screens, just write me and I will send them free. Not a penny would I ask for extra screens and riddles.

I also have a Free Service Department which will separate, clean and grade FREE any mixture you send in. If you've got some impurity in your grain that you cannot get rid of, don't get discouraged. Write me.

Handles all Small Grain and Grass Seed

My 1913 Chatham handles over 70 seed mixtures—wheat, oats, peas, beans, corn, barley, flax, clover, timothy, etc. Takes cockle, wild oats, tame oats and smut from seed wheat; any mixture from flax; buckhorn from clover; sorts corn for drop planter. Removes foul weed seed and all sunken, cracked or sickly grains. Takes out all dust, dirt and chaff. It is also a bully chaffer. Handles 60 bushels grain per hour. Gas power or hand power. Easiest running mill on earth.

Special Corn-Sorting Attachment

Last year I added a Corn-Sorting Attachment, which grades corn so that a *round* or *edge* drop planter drops the right number of grains in 98 out of every 100 hills (in repeated tests at State Agricultural Colleges). Same planters, loaded with *ungraded* corn, make only 65 out of 100 perfect hills. In two months I shipped to Iowa farmers alone 4,000 machines with Corn-Sorting Attachments. Try my Special Corn-Sorting Attachment. *It will increase your corn crop amazingly!*

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on Seed Selection. Every chapter is highly practical and exceedingly interesting. It shows an easy, simple way to get rid of any weed on your farm; how to separate any mixture of grains—in short, how to get perfect grain for *sowing, feeding* or *marketing*. Send postal *today* and receive by *next mail* my new Book *free*. Address Dept. 13,

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Different from any garden book you have read—not cut and dried theories, but actual facts about most successful gardeners in America. Story of Ruetenik farm only one feature. Secrets of success of sixteen other prominent gardeners revealed. Practices of most famous gardening sections described—how Boston gardeners make land worth $2,000 to $4,000 an acre show a profit from vegetables—how a Pennsylvania man grows $1,000 worth of celery an acre—how New Jersey growers make asparagus pay them $400 to $600 an acre—how mushrooms that sell for 50 cents a pound are grown—concise directions for growing and marketing all important vegetable crops—timely hints for every month.

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THE WEEKLY

Market Growers Journal

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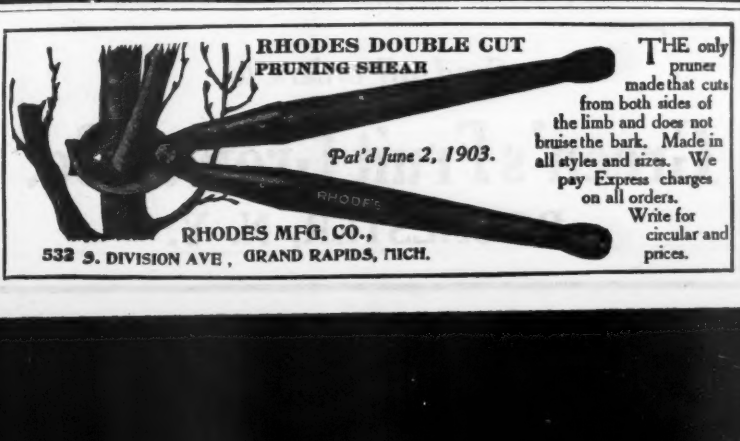
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ROCHESTER, N. Y.

THE FERTILITY PROBLEM AS IT INTERESTS THE CANNER.

An Address Delivered Before the Canners Association at Rochester, N. Y.

By Henry G. Bell.

Pure food is a question of not only timely but esential interest. The maintenance and efficiency of the human race are dependent upon the quantity and quality of food available for daily use. The American nation with its varied conditions of life is undergoing daily changes. The census-takers tell us that in 1890 every third citizen of this nation was found residing in town or city. A decade later a comparison of similar list of figures reveals the fact that nearly every other citizen is a resident of a municipality. Within the last decade the rural population of this country has increased 11.1, while the urban population has increased at the rate of 34.9 population, or nearly three times as fast. Political economists tell us that figures are significant of the fact that this is an age of a movement toward the cities or towns; that the tendency is for the land owner to reside in town and to operate his land by labor directed by managers. We hear so much at the present time about the movement back to the farm that we are almost led to contradict the above statement of the economist's, yet when the last word is said, statistics are in his favor.

Now, of what interest are these dry statistics to this audience of manufacturers? First of all, this large growth of



urban population means that a proportionately enormous amount of food must be supplied daily to these municipalities. One does not readily conceive the gravity of this situation. A little over three decades ago the farmers surrounding Chicago hauled their grain and farm produce to the city on cart and sled, and supplied the trade largely by means of a house-to-house trucking. The city experienced a prodigious increase in population, which enormous increase brought with it great economic problems. The farmer peddling his meat or vegetables was totally inadequate to the situation. Out of these great economic changes, therefore, there grew the world-famed Stock Exchange with all its machinery for the expeditions handling of the necessaries to the maintenance of man and beast not only within this corporation, but even in the confines of the more thickly populated parts of this country. Out of these changing conditions also grew the necessity of maintaining supply houses under government supervision. In its natural time also there evolved the enormous industry represented by this intelligent audience.

Not only is the canning industry for the expeditious handling of a few products of the land, but it is absolutely necessary to maintain sanitary handling of fruits and vegetables and all other products in large quantities. The American citizen is selective in his tastes, and is growing more so. He is not satisfied with delicious fruits in summer and grain and meat in winter. He desires palatable and yet perishable fruit in the season when it formerly would have been impossible to obtain them. Not only must the vagaries of his appetite be gratified, but his health must be preserved. Just as the increase in population of Chicago, as noted above, made it utterly impossible for a system of individual peddling to handle food stuffs with sanitation for that great municipality, so the increase in population has resulted in a time when food stuffs of every sort, especially those of perishable nature, cannot be handled in any other way than that which insures almost perfect freedom from disease.

(Continued Next Month.)

Farmer Boy Wants to Become an Actor

Please inform me how I may become an actor. I have thought an actor's life must be a pleasant one and very profitable. How do clowns in the circus become trained so as to be so comical?—Farmer Boy.

C. A. Green's Reply: It seems natura for the farmer boy to look with longing eyes upon other work or professions than farming. Especially does the life of the circus performer and the actor attract the boy on the farm. To this boy the life of the clown or performer in the circus or the actor on the stage seems like mere play. Life in the circus tent and on the stage of the theatre seems to the boy like life in Arcadia or Paradise.

But I can assure the farmer boy that such visions of the circus and the theatre are absolutely false. There are few more laborious professions than those of the circus performer or the actor. The thought of traveling day after day and night after night, year in and out, does not seem to the boy to be serious, but those who have had experience know that this constant traveling is a strain on vitality and after a short time becomes exceedingly wearisome, but both actor and circus performer must be continually traveling. There is no more precarious profession than that of the circus performer and that of the actor, who are constantly liable to be thrown out of employment and left in a strange town far from home without money or friends.

Bear in mind that there is no occupation, no business or profession, no means of achieving success without vexations, trials, tribulations, hard work, and much self-sacrifice. There is no ideal occupation to which one can achieve success lying on a bed of roses. Farming and fruit growing have their drawbacks and discouragements, but when these occupations are considerately weighed and compared with other vocations they may be considered almost ideal. Actors and clowns are generally born that way inclined. I do not know of a teacher.

The Boy on the Farm.

Editor of Green's Fruit Grower:—Very seldom does one pick up a farm journal or agricultural magazine without a well written discussion of how to keep the boy on the farm. Yet the outflow goes on, always on. This restless spirit is most likely due to the apparent profitableness of the other callings.

Youth is impulsive, wants something new, wants sonething of its own to show what it can do. Why not give the boys a chance at home, give them half an interest in the stock. You do not want a servant or slave in your son. You want a partner. Why not share profit as you do work with him?

We cannot all be farmers or like the work. Would you like to be a tailor or a barber? Perhaps not, and if you did not like it you would be a failure at it. It is the same with the boy. Not all boys are born to be farmers, but we can try to interest them in farming, and ninety per cent. will be interested if we teach them to love the soil they cultivate, and encourage them at an early age to plant an orchard or a vineyard. The boy will learn to watch and wait for the bearing with more interest than we do, and later on, when he has grown to manhood, the profit of the planting will come in and he will see that there is something more than work in farming. Then his heart and soul will go into the soil with every tree and plant. He will learn to look at other stock or farms and try to do better, and before long you cannot drive him away from the farm.

Every man born on a farm tries to get back to it when older. He will move into the suburbs just to be near the fields, and still it is claimed the boy does not love the farm. I say he does love the farm but he does not like being an unpaid hired man. Give even the little boys a few hens or turkeys so that they may know the feeling of ownership. Then you will not have to wonder later on where your boy is roaming around.—Adelinde Klose, Missouri.



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REASONS WHY.

Green's Trees are hardy, northern grown and full of life.

Green's Trees are straight, smooth, well-formed and true to name.

Green's Trees will thrive and produce fine fruit in every fruit section of the United States.

Green's Trees are triple inspected—only the good trees go to you—read our guarantee.

Green's Trees are well packed in paper lined boxes, which must be used to keep roots from drying in warm weather and from freezing in cold weather.

Green's Trees have perfect root systems due to whole root grafting and budding, much cultivating and proper digging.

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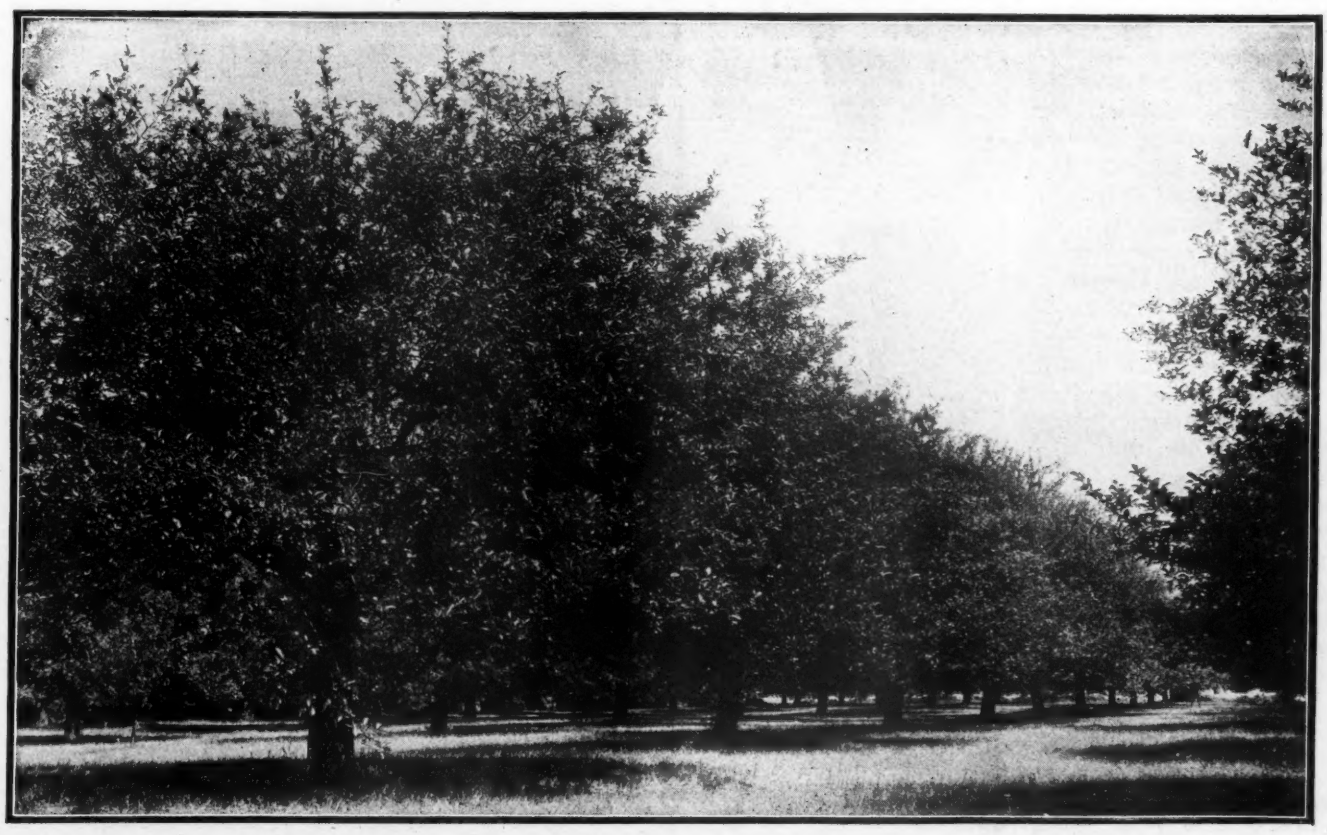
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Here is the chance of a lifetime to buy the best roofing in the world, at a mere fraction of it's real value. Our enormous buying power enabled us to pick up for spot cash a stock of this brand new, perfect corrugated, "V" crimped and Standing Seam Roofing and Brick Siding, at a tremendous sacrifice — 'way under what it is actually worth. Immediate cash needed made possible this purchase. Just another chapter added to the long list of our famous bargain sales.

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There is nothing else that compares with corrugated steel roofing for real protection. It makes a long, lasting roof. Is fire, rain, frost, wind, sun and lightning proof—warmer in winter—cooler in summer; and under ordinary circumstances does not leak, rot or warp, neither does it taint rain water. You can depend upon it that Corrugated Steel is the best material for roofing, siding and ceiling.

At 1¼c per square foot, we furnish our grade **AB-700** Steel Roofing, in sheets 22 x 24 inches x 1¼ inches. This price is delivered on board cars at Chicago.

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Another big Steel Roofing Bargain. Several thousand squares of the very highest grade specially coated, corrugated, galvanized roofing and siding, made of specially prepared steel, of superior quality. Best roofing, and will last indefinitely. We will furnish it in suitable lengths for any purpose. Only a limited quantity on hand, so we urge you to send us your order immediately. Don't wait to write us again—order today, while this stock exists. Price only 2¾c per square foot, and will outlast 4 to 1. Just drop us a line, and tell us the size of your studding and general facts, and we will help you to select proper sheets. If you are not ready to use the material now, we will reserve it for future delivery, if you will give us a small deposit on account. This price of 2¾c per square foot is for our Lot **AB-800** corrugated material, and is delivered on board cars at Chicago. If you prefer some other style, we will furnish it. We have this same grade in "V" crimped, Standing Seam and Brick Siding. Samples on application.

Ready Roofing With Supplies
62c Per 108 Square Feet



We have several thousand squares of a superior quality Ready Roofing, which we are offering in our AJAX BRAND, 1-ply, at a price of 62c per square of 108 square feet, including necessary cement and caps to lay it. This is undoubtedly the most remarkable bargain ever offered in Ready Roofing. This famous brand is put up 3 or 4 pieces to a roll.

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We Pay the Freight

in full to any point east of Kansas and Nebraska and North of the Ohio River.

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This **Ajax Roofing** is guaranteed to wear as long, and give as good service as any Rubber Surface roofing on the market.

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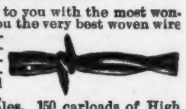
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Galvanized, two-point Barb-Wire, full weight (not the light kind) put up regular on spools, containing about 100 lbs. to a spool. It is made of No. 12½ wire, with good weight barbs. Price per 100 lbs. during this sale, **only $1.95. Order by Lot No. AB-600.** Several thousand spools of this Barb Wire, Painted, price per **100 lbs. $1.75. Order by Lot AB-500.** Also have in stock 1000 spools of light weight, new galvanized barb wire, put up 80 rods to the spool, made of No. 14 galvanized wire, No. 15 barbs, barbs 5 inches apart; price per spool of **80 rods $1.45. Lot AB-400.** We also have several other bargains. You never had a chance like this before, and we advise that you send us your order today. Don't wait until the material is sold—we cannot hold this quotation open.

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At a Material Reduction in Price

10,000 rods of 26 in. Galvanized Steel Spring Wire, 26 in. high, hog fence, put up in 10, 20, 40 and 60 rod rolls, made with 7 bars, spaced 12 in. apart, with No. 9 top and bottom wires, No. 11 intermediate wires, heavier than the regular fencing offered. Price per rod, during this sale, **only 15c. Order by Lot AB-900.**

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10 pennyweight, $2.00
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6 pennyweight, $2.15
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Also 5,000 kegs of Nails, mixed all kinds in a keg; good assortment, handy to have around your workshop. During this sale only, **per 100 lbs., $1.45. Order by Lot AB-1100.** We have other bargains in nails.

Also, in this same job, we have 5,000 kegs of Fence Staples, galvanized; **per keg, $2.00. Lot AB-1400.**

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